THE BEAUTIFUL FLOWER GARDEN

ITS TREATMENT WITH SPECIAL REGARD FOR THE PICTURESQUE

WRITTEN AND EMBELLISHED WITH NUMEROUS ILLUSTRATIONS BY F. SCHUYLER MATHEWS

WITH NOTES ON PRACTICAL FLORICULTURE BY A. H. FEWKES

TENTH EDITION.

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E all love flowers, and are ever searching for more knowledge regarding their peculiar characteristics and dainty habits; we do not need to be convinced of their beauty; on that point our knowledge is complete. That flower gardens, therefore, are beautiful, goes without saying; yet there are some which certainly are not quite as lovely as we think they ought to be. Let us pass the reason why, and proceed to learn about those things which contribute toward the loveliness of an ideal garden.

The chief beauty of the garden should lie in its flower colors and plant forms, and not in the symmetry of its beds and borders. If our ideas of a perfect garden include any rigid geometrical principles, we would better study Nature and let all ideals go! Our ideals, at best, are extremely limited, while Nature's realism is immeasurable; she puts so much variety into her reality that she is more beautiful than we can imagine by sheer force of quantity! Ten days for an artist in a mountain valley will give him ten views from the same point which will be entirely different each day. Yet one is apt to imagine a view always the same as he happened to have seen it on one particular occasion. After a ten days' acquaintance with Shirley poppies or El Dorado marigolds, the poppies and marigolds of our imagination dwindle into insignificance! We may
remember the beauty of the Auratum lily pretty well through the winter, but the following summer will bring us a new revelation of its loveliness.

We should seek to display the whiteness and purity of the lily in the garden, and not trouble ourselves so much about the shape of the brown earth patch from which it grows. The dainty pink of the rose is not enhanced by the star shape of the garden bed beneath it, nor is the delicate blue of the forget-me-not any prettier when the little plants are jammed together in compact masses. Such methods for laying out a garden do not add to its beauty, in my opinion, nor, for that matter, do they detract from the beauty of the flowers; but what is completely lost sight of, is the lesson which nature teaches by every wild flower in every sunny vale and woodland dingle; that is, that light and shade, color and form, freedom and grace, and simplicity are the crowning elements of loveliness in Flora's world.

There is but one way, I believe, for us to make our garden look truly beautiful; we must choose the simplest and most natural methods for the display of its flowers. It is the aim of this little volume to cover that point completely; that is, so far as the most available and simple artistic means will go. I am sure of one thing regarding the extent of our flower gardens to-day; they do not contain half enough flowers! The crops are entirely too small. Let us have all the flowers we can possibly afford; they are the veritable smiles of Nature.

Many of the perennials and most of the annuals are easily grown; some of them are profuse bloomers, and we have in Mr. Fewkes an excellent instructor in their culture and care. It is to him that we are directly indebted for the possession in this country of those two charming chrysanthemums named the Mrs. Alpheus Hardy, and the Lilian
B. Bird. I believe that Mr. Fewkes knows how to feed young plants and care for them just as a mother robin would her newly fledged offspring. Following his instructions and suggestions, we may reasonably expect to raise a flourishing, healthy, and handsome number of families in the Beautiful Flower Garden, which will vie with each other in richness of color. But by all means, let us give each member of the different families the opportunity to be properly seen and appreciated.

Packed together in geometrical spaces, flowers remind me of soldiers. Now soldiers represent law and order, and these are necessary for the preservation of peace; but flowers are peaceful poets, not disciplined soldiers, and it is hard to understand why they should be drawn up into line. Whole phalanxes and platoons of hyacinths and tulips look to me as though they were arranged that way for a permanent review by some commanding officer. It is my idea that we should pay more attention to the flowers themselves, and less to the spaces in which they are planted; then the studied arrangements of color and form will naturally make the garden a thing of beauty.

F. Schuyler Mathews.

El Fureidis, Campton, N. H.,

September, 1893.
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WHEN the last snow of winter is gone, and when the first notes of the returning robin are heard, then it is time for us to turn our attention to the garden. The first question which naturally arises is, when will the ground be ready for the seed? Supposing that the garden beds are fully prepared, the seed can be sown whenever the sun begins to show its power. Two things we may be perfectly sure of: seed will germinate quickly in a temperature of 90° with a liberal amount of moisture, and when we cannot obtain this condition out-of-doors in early spring, the nearest approach to it indoors will insure equally satisfactory
results. I do not say by any means that 90° is exactly the temperature which is best; my own experience has taught me that with this amount of heat I can do some pretty rapid gardening either in a tumbler of water or a small lump of mud! Water, and a plentiful amount of it, too, is absolutely essential when the temperature is kept so high. But, under more natural conditions out-of-doors, 65° to 75° is sufficient warmth, when combined with moisture, to start the seed in a reasonable space of time.

I have mentioned the fact that seed is sometimes soaked in water; it would be best to hear what Mr. Fewkes says about that and other methods for forcing the seed into rapid germination. Up in the cold mountain district of central New Hampshire, a country where the spring comes very late, the farmers' wives, all of them, are extremely fond of flowers, and take the greatest care of their young and tender plants within the kitchen; they also force dahlia and gladiolus bulbs, as well as the seed of certain late-blooming annuals, in boxes of damp, rich loam, under or near the stove.

Moisture. We should not forget that plants as well as seeds need plenty of water, especially in the rather dry atmosphere of our rooms. I believe that more plants die from thirst than from any other reason. The humidity in the greenhouse is one of the open secrets of the success of a florist. Of course, there are certain plants which do not possess the water-absorbing quality to any degree of excess; but to my mind they are all "hard drinkers!"

Sandy Soil. The character of the soil, too, has a great deal to do with our success in the garden. I hear people complain very often about the barren, sandy kind of earth they have to contend with, and wonder why,
under the same conditions, I have any success in my own modest flower plots. For excellent reasons, sandy soil is quite the best for many of the annuals; all it needs is a good quantity of top dressing and the untiring devotion of the garden hose. Notice what Mr. Fewkes says about garden soils, and particularly about sand for raising little cuttings in.

**Manure.**

Chicken-yard manure contains the most complete mixture of the ingredients which constitute perfect plant food. This, with a judicious use of common farm phosphate, will give all the enrichment that our sandy soil needs. The sketch suggests the treatment of sandy soil about a young plant which has just been transplanted. For asters, fuchsias, and such flowers as may require a firmer foundation than sand will supply, one may obtain a rich, clayey loam, which can be found at the edge of the wood, in some damp locality.

**Late and Early Frost.**

The late arriving spring is the principal difficulty with which I have to contend in the management of my own garden. That means that there is danger of frost as late sometimes as the 20th of May. Then, too, Jack Frost not unfrequently turns up again as early as the 10th of September, when the garden is in the height of its bloom, and away go all the flowers, leaving nothing but wilted stalks to blacken and look ghastly through the rest of the month, when the mercury may never drop beneath
60° and is as likely as not to hang around 80° for a week or so!

I would advise those who are as far northward as I am, and who have been unfortunate in a similar way, to adopt several plans to defeat the mischievous Jack, which seem to me simple and practical; these methods have been put to the test, and they are certainly commendable.

**Protection against Frost.**

First, keep the regiment of flower beds together within a moderate space, so it is under complete control of its commander; then the fight is simplified, and there are no outer wings to risk destruction. Next, use all the available tubs and pots for such flowers as may promise the most for September blooming; these it will be possible to move indoors or to some sheltered corner. Then, an excellent way to protect those plants which cannot be moved is to cover them with newspapers or cloth. Newspapers are warm, and like India-rubber they furnish no ventilation; they are always available, and with the aid of clothes-pins and laths for support a formidable barrier can be constructed against Jack. Watch the thermometer, and if it falls to about 45° by 8 or 9 P.M., prepare for the enemy! Jack never comes, though, if there is any wind;
his work is done in the silent night and under a cloudless sky.

I have also found the hay-cap a very useful cover for exposed positions in the flower beds; these are simple, light affairs made of wood pulp shaped like large, circular cockle shells, about three feet in diameter; half a dozen of them will go a great way toward protecting the garden.

A Northern Climate. But we will suppose that there are only a few of us who are hampered by the disadvantages of a northern climate. The others are fortunate in so far as they have less work to do to keep their gardens in flourishing condition. The success and extent of my own garden I can truly say is not materially interfered with by its high latitude. The situation is in one of the southern valleys of the White Mountains, and the altitude is over 600 feet above tidewater; yet my dahlias grow splendidly whenever I start them in season, and all the annuals produce the largest and most perfect flowers; indeed, I believe the possibilities of brilliant and large blooms are as great in central New Hampshire, if the proper methods of cultivation are pursued, as they are in any part of New Jersey; but there is more work to do in New Hampshire, and a sharp eye must be kept on Jack Frost.
I have been told, "You cannot do this," and "You cannot do that," by those who are supposed to know all about the climate; but if one is willing to work, it is astonishing to find how quickly these so-called impossible things are accomplished. For this reason, we can afford to put advice aside now and then and push out on some doubtful venture with more than even chances of success. If we fail the first time with the Auratum lily, it is worth while to try it again three or four times before acknowledging ourselves defeated. We should plant more seeds and bulbs in the garden, and not be afraid of a few failures; they are very often the stepping-stones to success.

A failure now and then proves an excellent teacher. One of my flower beds facing eastward, and directly in front of the cottage, proved a miserable place for any kind of a plant. It was a failure in every respect, and after studying the case it became evident that the plants were starving for water. The bed is two feet above the level of the lawn. To-day it is a success by reason of a few sunken soap boxes! There was no other way to make it retain the necessary amount of moisture. Furthermore, I have given up the attempt to grow anything in it but marigolds; these thrive better under the existing conditions than any other plants; they are watered frequently, and they can stand the burning heat of the morning hours. After one o'clock the bed is in complete shade.

As for the hose, it is in constant use in the garden until well on in the summer, when the plants are sufficiently grown to shade the ground; the evaporation then is not so great, and the plants have attained a strong growth capable of resisting the powerful rays of a merciless New England sun.
The soil in my garden is extremely light and sandy, and I have to use every precaution to prevent the water from running away or evaporating; there are two old boats filled with sandy loam, and no less than three dozen tubs made of barrels, besides several trim-looking green boxes shaped like my sketch. The farmers say, up this way, that all the water and most of the top dressing goes through to China; and with a little experience in the flower garden, one is almost inclined to believe them! To those who have this light soil to contend with, I have a word or two of advice.

While the young plants are growing, keep the ground constantly moist. This is far-reaching advice which it will not be an easy thing to follow; but success in the flower garden which has light soil is, I believe, dependent upon the following of this rule; the seeds will certainly not germinate in dry ground. For my own part, I water the ground constantly, especially on hot days, sun or no sun, taking the greatest care not to wet the young plants; and I scarcely ever sow any seed without having previously soaked it at least four hours in tepid water. Use common unbleached white muslin to shade the ground where poppy seed has been sown, stretched on four sticks by four tacks as my sketch indicates; this device prevents
complete evaporation on days when the thermometer runs very high. We must remember what the seedsmen constantly tell us on nearly every packet of seed they sell—"Do not let the seed dry out."
CHAPTER II.

FLOWER SEEDS AND GARDEN PLANS.

If I had a very small amount of money to invest in the flower garden, my plan would be to put that amount almost entirely into annuals. For instance, let us see how far $2.00 will go. My own choice would be about like this:

<table>
<thead>
<tr>
<th>Seed</th>
<th>Price or Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaranthus</td>
<td>$0.05</td>
</tr>
<tr>
<td>Aster, Victoria, blue</td>
<td>10</td>
</tr>
<tr>
<td>Comet, white</td>
<td>15</td>
</tr>
<tr>
<td>Balsam (best), white or pink</td>
<td>10</td>
</tr>
<tr>
<td>Calendula, mixed</td>
<td>5</td>
</tr>
<tr>
<td>Centaurea, blue</td>
<td>5</td>
</tr>
<tr>
<td>Eschscholtzia, mixed</td>
<td>5</td>
</tr>
<tr>
<td>Marigold, dwarf, yellow</td>
<td>5</td>
</tr>
<tr>
<td>El Dorado</td>
<td>5</td>
</tr>
<tr>
<td>Mignonette, Machet</td>
<td>10</td>
</tr>
<tr>
<td>Nasturtium, dwarf, Pearl</td>
<td>5</td>
</tr>
<tr>
<td>Rose</td>
<td>5</td>
</tr>
<tr>
<td>King Theodore</td>
<td>5</td>
</tr>
<tr>
<td>King of Tom Thumbs</td>
<td>5</td>
</tr>
<tr>
<td>Petunia, mixed</td>
<td>10</td>
</tr>
<tr>
<td>Phlox Drummondii, mixed</td>
<td>5</td>
</tr>
<tr>
<td>Poppy, Shirley</td>
<td>10</td>
</tr>
<tr>
<td>Carnation fl.</td>
<td>5</td>
</tr>
<tr>
<td>Stock, Ten-weeks, mixed</td>
<td>10</td>
</tr>
<tr>
<td>Sunflower, Globosus fistulosus</td>
<td>5</td>
</tr>
<tr>
<td>Sweet Pea, mixed</td>
<td>5</td>
</tr>
</tbody>
</table>
Morning Glory, ... $0.05
Scarlet Runner, ... 5
Zinnia, dwarf mixed, or Lilliput, ... 10
Gladiolus, half dozen, ... 15
Tigridia, 2 Conchiflora, ... 10
Milla biflora, 1, ... 10

—— $2.00

Some of the seed merchants offer $1.25 worth of seed for every dollar's worth ordered. In such a case I would add to my collection the following: —

Coreopsis Drummondii, ... $0.05
An. Chrysanthemum, Burridgeanum, ... 5
Candytuft, Boston Florist, ... 10
Scabiosa, black, ... 10
Canary Bird Vine, ... 5
Phlox Drummondii, salmon rose, ... 5
Hyacinthus Candicans, 1, ... 10

—— $0.50

All of these varieties are easy to take care of. Most of the seed germinates quickly, and the few bulbs I have mentioned flower continuously through the summer.

Quantities of Flowers.

It may be a difficult thing to believe, but it is nevertheless a fact, that from this small outlay of money it is possible to raise an immense crop of flowers! With attentive care and a good season, there should be hundreds of nasturtiums, marigolds, poppies, phloxes, and calendulas. I have picked over two thousand blossoms exclusively from the five varieties above mentioned in about three days' time; and the total cost of the seed was only forty

*W. Atlee Burpee & Co. advertise a splendid list of ten popular annuals for 25 cents. This is a great opportunity for those of limited resources, which should be taken advantage of regardless of any preferred list.
FLOWER SEEDS AND GARDEN PLANS.

cents,—about as much as we would pay for two roses during the winter months! After careful planting and nurture, the dwarf nasturtium rewards one with an immense quantity of bloom. Twenty-five cents worth of seed will furnish plants enough to enable one to pick fully three hundred flowers a day for many days in succession!

If it is possible for us to extend our purse and lay out $5.00 on the garden, then add to the list already given the following:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lily, Auratum</td>
<td>$0.25</td>
</tr>
<tr>
<td>&quot; Candidum,</td>
<td>10</td>
</tr>
<tr>
<td>&quot; Speciosum roseum,</td>
<td>15</td>
</tr>
<tr>
<td>&quot; &quot; rubrum,</td>
<td>15</td>
</tr>
<tr>
<td>Bessera elegans, 2</td>
<td>15</td>
</tr>
<tr>
<td>Tigridia alba, 2</td>
<td>10</td>
</tr>
<tr>
<td>Fuchsia, Black Prince,</td>
<td>15</td>
</tr>
<tr>
<td>Geranium, 6</td>
<td>50</td>
</tr>
<tr>
<td>Pansy</td>
<td>20</td>
</tr>
<tr>
<td>Lemon Verbena</td>
<td>10</td>
</tr>
<tr>
<td>Ricinus, mixed</td>
<td>5</td>
</tr>
<tr>
<td>Gladiolus (scarlet), 6</td>
<td>15</td>
</tr>
<tr>
<td>Silene</td>
<td>5</td>
</tr>
<tr>
<td>Chrysanthemum</td>
<td>15</td>
</tr>
<tr>
<td>Canna</td>
<td>15</td>
</tr>
<tr>
<td>Dahlia, 4</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3.00</strong></td>
</tr>
</tbody>
</table>

If to this amount the seedsmen allow us to add 75 cents worth extra, better put all of it into roses of the hardy hybrid perpetual order. I am very fond of the Magna Charta; but, as tastes differ and all roses are beautiful, it would be best for me not to give any advice in this direction.

It must be borne in mind that these lists I give are subject to many changes according to the taste and discretion of each one of us.
In any case, I believe in investing at least 20 per cent. of our garden fund in roses, although my lists do not seem to point that way. But, as a matter of fact, we need the most information about the annuals; their number can be cut down according to our individual ideas, substituting roses for such particular ones we think we do not care for. Although I do not believe in packages of mixed seed, it seemed best to put them in the list for economy's sake. After the first season it will be possible for us to select the specific varieties whose colors we fancy most; but in all probability we will have quite a collection of seeds of our own raising, marked with special reference to colors. I tie the stem of the particular flower whose color I fancy with a bit of red, blue, or yellow rag, make a note of it, and wait for the seed-pod to ripen. We must remember, though, that in order to keep a plant in continuous bloom, the flowers should be picked as fast as they come out.

The following varieties are distinguished by remarkably brilliant or else dainty coloring:—

- Fairy Blush Poppy
- Eider Down "
- New Cardinal "
- Pure Gold Calendula
- Mandarin Eschscholzia
- La Malmaison Balsam
- Little Brownie Marigold
- Prince of Wales Aster
- Lottie Eckford Sweet Pea
- Victoria Bachelor's Button
- Yellow Phlox Drummondi.
- General Jacqueminot Zinnia
- Edw. Otto Nasturtium, tall
- Lemon African Marigold
- Madame Crozy Canna
- Beaten Gold Scabiosa

Passing now from the seeds which we have selected to the ground which we must plant them in, we should select
situations most advantageous for certain plant forms as well as flower colors. This directs attention at once to some kind of a garden plan.

The character of our garden must in a great measure depend upon the situation. If we live in a city house, with brick walls about us and a back yard 20 x 45 feet square, it is evident that our plan must be limited to some rather severe arrangements. But I cannot help thinking that we could cut loose from the monotonous parallelogram if we chose; this may interfere with certain laundry privileges, but it is possible to hang clothes out to dry more than one way. The post with radiating arms is one excellent means of keeping the clothes-drying process from completely monopolizing the yard; and it is also possible to plant the usual four posts in positions where they can be reached
easily from the walks, without necessitating the use of the central plot. I should put six posts in the positions marked on my plan, rather than allow the central plot to be strung over by the clothes-line. The posts will serve to train the scarlet runners on.

Plan A shows what may be done with a yard which is already laid out on the usual square plan. I always like to see a plain green bench somewhere among the flowers. It is possible one might like to sit down and en-

joy the sweet-scented, bright-colored blooms for a while. The grass-plot may be cut to hold two beds reached by narrow gravel paths as I have indicated. At the back of the yard a screen may be constructed of chicken-yard wire
fencing, which will make a splendid show of color when tall nasturtiums, morning glories, or scarlet runners are in bloom. This wire fencing will also be an excellent support for sweet peas, and I should put it wherever there was a blank space which needed to be covered with vines. The glaring white fence I should take particular pains to hide in every possible way.

Plan B shows what might be attempted with a yard which we could lay out ourselves, using brick walks with an edging of brick set up on end. Fine gravel walks are preferable, artistically considered, but they have some undeniable disadvantages. The flagging and concrete in common use in our cities seems to me one of the most ugly things imaginable. So far as the arrangement in detail of either of these back-yard gardens is concerned, I must leave that to the discretion of the owners. The ideas which I
explain through succeeding chapters will apply in a great measure to all the needs of artistic gardening in the city yard. I need only add that we will find the limitations not so great as we supposed they were, if we will only forget what has been customary and adopt some freer methods of displaying our flowers.

Suburban Garden. Plan C is intended for the grounds of a suburban house. It is so simple that explanation seems unnecessary. But it is my insistence on simplicity of arrangement which I mean shall distinguish this book from all others of its kind. We will have all we can do, by and by, to follow the suggestions given for displaying flowers so their colors and forms will show to the best advantage. Supposing, for instance, that anyone sits down on the seat at A; my idea is, that they should see a picture like my sketch on page 22. Now, the plan of the grounds has much less to do with the prettiness of the picture than the fact that I have placed those gladioli directly in front of the dark cedar trees. In looking up the path from the gate, I should fancy the effect in perspective produced by the plants in boxes.

Country Home Garden. Plan D is arranged for a country home with grounds sufficiently ample to justify some attempts at landscape gardening. Notice that there is scarcely so much as a hint at a geometrical figure; in fact, a circle or two or a parallelogram are all that can claim any relationship with symmetry; yet I believe that this plan is capable of furnishing us with an endless variety of artistic effects. In proof of this, place the pencil at any point on one of the paths, choose some particular direction in which to look, and then read what lies on the plan in that line of vision. My sketch suggests such a vista, and I am sure it is only
one of a hundred which must prove equally attractive if our imagination will fill in the colors and forms.

Since we always see across a garden (sideways, so to speak), and never as a bird would look, plumb downward, it seems to me reasonable that the most pains should be taken with flowers, shrubs, and trees as they show one against another. So, in planning a garden it is advisable to place a clump of white lilies directly before some dark evergreen shubbery, or something with similar somber foliage, and plant the ruddy-leaved Ricinus where it may have a background of palest green leafage. But I would abandon the idea of producing colored patterns with the
coleus, and I should never trouble myself to lay out a star-shaped bed for the gallant tulip! My sketches of simple-shaped flower-beds I think will answer for all purposes, artistic or otherwise.

The elliptical bed is easily laid out with a bit of stout string (the two ends of which are tied together) and two stakes (see the sketch); by pulling the band of string taut with a long nail or knife, either will swing around and mark an unerring curve on the ground. The breadth of the ellipse can be increased by placing the two stakes
nearer together. There is no reason why we should not

employ a ribbon border here and there among the flower-beds if we fancy such a thing.
CHAPTER III.

COLOR HARMONY.

The chief beauty of the flower garden is its color. If we are inclined to consider color as only one of the essential elements of its beauty which attract us, we make a mistake; it is the color of the tulip, the rose, the dahlia, and the chrysanthemum which is the attraction as surely as we possess eyesight. The appreciation of beautiful forms and artistic arrangements, the perfume of the flowers, and their varied characteristics, are all matters of secondary interest compared with the golden yellow, the sapphire blue, the ruby red, and the royal purple which gladden our eyes when the spring flowers begin to bloom.

Imagine a garden bereft of every color but green; and suppose every flower presented to our eyes a variation of that one hue; what would we think then of the garden's beauty? Would the bees find the flowers and continue to gather honey? I think the answers to such questions will compel us to place color first on the list of the attractions in a garden, and underline the word as well.

But colors must be harmonious or else they will lose their value; we all have an idea about which ones will look well together, but we have no practical knowledge of the way to bring them with their infinite variations into harmonious company. My little diagram may possibly
help in bringing about a clear conception of perfectly simple color harmony.

The wheel indicates sixteen commonplace colors, which (theoretically speaking), when mixed together in certain proportions, will produce white. Although red, blue, green, and yellow comprise what are called the primary colors, my twelve additional ones are simply extensions right and left of these, and furnish those hues which we constantly meet with in the flower garden.

Color Theories. I do not propose to explain any elaborate color theory in these pages, but I wish to show how by the aid of my simple little diagram we may arrive at some unmistakable truths of harmony and discord. The sixteen colors are:

- Violet,
- Ultramarine blue,
- Blue,
- Turquoise blue,
- Emerald green,
- Yellowish green,
- Greenish yellow,
- Yellow,
- Golden yellow,
- Golden orange,
- Orange,
- Scarlet,
- Red,
- Crimson,
- Magenta,
- Purple.

Now, for colors which will harmonize with each other,
we may read on the list above and on the wheel those which are exactly opposite in their relative positions; for instance, yellowish green and crimson. The colors which conflict with each other lie at exactly right angles on the wheel, and at every fifth one on the list. Beginning haphazard with yellow, therefore, we may read the discordant colors as, yellow and scarlet, or, yellow and turquoise blue. Of course, I mean that we can choose any color on the list, count it as one, and find the discordant fifth in either direction.

One fact more regarding harmony as illustrated by the wheel, and we have compassed the fundamental principles of color in a nutshell.

There are two kinds of color harmony; one is contrastive, as, for instance, blue and orange, and the other is analogous; as, crimson and magenta. In a word, those colors which are near neighbors to each other are, as a rule, quite agreeable to the eye, and the ones which are radically opposite in appearance we instinctively feel are never complete out of each other's company. Actually blue is more complete with a patch of orange beside it because it looks brighter. Crimson and magenta are, so to speak, two points of view of red when it is more or less influenced by purple. For colors, then, which are by their relationship harmonious, read on the wheel any three which lie side by side, or on the list, three which occur in succession.

If we accept this simple formula as a safe guide as far as it goes (it is not very far reaching), we may be sure of committing no error when we arrange the highly colored flowers in our garden beds.

Primary Colors. But it is necessary to understand exactly what the color is which we call red, or blue, or yellow. For the sake of something tangible I
shall call the Portia carnation pure red, the zenith blue of the sky pure blue, and the wild mustard at its yellowest best, or the lemon-colored African marigold, pure yellow; the outside surface of the buttercup's petal is also near the pure yellow. The scarlet runner is exactly an orange-scarlet, the President Hyde chrysanthemum is a perfect golden yellow, and the bluest bachelor's button is blue inclined toward the ultramarine tone. There are powerful tones of purple in the cinerarias ranging right and left toward crimson and toward ultramarine blue; the daffodils give us a wealth of golden orange, and also yellow tints reaching as far as greenish yellow, and among the petunias we may find varieties crimson and solferino in hue.

A perfect knowledge of the individuality of a certain color is, without doubt, a matter of education. When once we know that the scarlet vermilion of the artist's paint-box or the Madame Crozy canna is pure scarlet, when that color is before our eyes for days in succession and our memory of it is established beyond doubt, then we may be sure that we hold in our hands a key which will unlock the secret door of all knowledge of color.

There is another thing, however, which will greatly impede any advance in acquiring a perfect knowledge of colors; that is, a strong prejudice in favor of or against some particular hue. Who among us can say, "I have no favorite color, and there is not a single one which seems to me ugly"? It is quite natural that we should have preferences and dislikes, but it is nevertheless a fact that these will
sometimes give rise to prejudice, and blind us to the beauty of a certain color.

I am constrained to quote a passage from that charming book which Mr. George H. Ellwanger has recently written, entitled "The Garden's Story," in illustration of what I call color prejudice and its limiting results. After speaking of the undesirable crimson-magenta color of the June Pyrethrum, he says: "I think there is much in what a young lady once observed to me at a ball, the conversation turning on the newly decorated rooms: 'I don't think the glaring combinations and unhappy uses of color we frequently see in houses and exhibited in dress so much the fault of individual taste as of a deficiency of the color-sense. Let us count the green dresses, of which there seem to be an unusually large number present, and I assure you in advance that at least every third person you ask will pronounce the delicate shades of green, blue. A hideous solferino looks all right to some; it appears the same shade to them, doubtless, as a cardinal or a terra-cotta or some other shade does to you. I haven't the slightest doubt that color-blindness is at the bottom of much of the distress that one's eyes are forced to encounter.' Solferino and magenta, or shades closely touching upon them, should not be tolerated in the garden."

**Infinity of Color.** Mr. Ellwanger quotes what the young lady said in evident sympathy with her ideas. I agree also with much in her remarks, but I am inclined
to think that she discovered only one half of the truth. It is true that color-blindness is in the main responsible for the egregious errors we sometimes see in color combinations, but the rest of the responsibility lies with those who are ignorant of the infinity of color, and who, because of a restricted acquaintance with a few positive or brilliant hues, are unable to bring the right ones together; having no knowledge of the other color needed to support magenta, why should they succeed in making magenta look any other way than ugly?

It is with some regret, because of resulting injustice, that I note those two words—solferino and hideous—linked together. I know solferino is a grand color, as solemn as the diapason note of a great organ. I recognize in the cinerarias a glorious effort of Nature to do justice to this uncommon and princely hue of purple-red, a color which it seems pure except in a flower or bit of stained glass; no wonder, therefore, that most of us do not appreciate its beauty. If we saw scarlet mixed with mud as often as we have seen magenta in this condition, we would drop its acquaintance in flannel as well as geranium! I should fear to lose the lovely new cattleya if we condemned the purple reds, and I should miss many of my esthetic zinnias!

Peculiar Harmonies. Solferino cannot look all right unless it is alone or in the company of red-purples or yellow-greens. One of the most prominent of the English artists, Edward Burne-Jones, pos-
senses to a remarkable degree the ability to use magenta, solferino, crimson, violet, steel-blue, and ultramarine-blue as no other artist has dreamed of using them! It is a significant fact that this artist is a great colorist, and these colors, all more or less tinged with purple, are like the deep baritone notes of an organ. If we choose to consider magenta an ugly color, we must believe that there is a corresponding ugliness in the bass tones of the musical scale. I am not imagining a connection between sound and color; that is an established scientific fact. I must continue the simile, and say further, that if we are only attracted by such hues as yellow, golden-yellow, orange, scarlet, red, blue, turquoise-blue, and green, our appreciation and knowledge of color is defective, and we are limited to what only represents the soprano, contralto, and tenor tones of the color scale! Such a defective range of color, I think, corresponds with the musical scale of a piano from which at least three octaves have been stricken out.

I cannot exactly agree, therefore, with what Mr. Ellwanger says about solferino and magenta, even though his opinion corresponds with that of a great many people; but it is a fact that so far as these colors are concerned with the average garden, their appearance is intolerable; that is not the colors’ fault, though! Must we forego the beautiful petunias with their crimson, magenta, ultramarine, and solferino garments simply because somebody does not know that the scarlet, blue, and orange flowers near them are ruining the pathetic sweetness of their somber color-tones? I think not; the better and more practical move would be, for instance, to keep all the *Tropaeolums* out of their vicinity. I notice that in my own garden the distance of twenty-five feet between a scarlet geranium and some crimson-magenta sweet-williams is not enough to prevent the
former from doing the latter damage, because I have placed the two plants in positions where they can be seen with one sweep of the eye, and I have not put the proper mediating white and greenish-yellow colors in between. I might except from the Tropaeolums the dainty pale and subdued yellow pearl nasturtium, which is sufficiently refined to look well with magenta; but if we wish to make the magenta as hideous as Mr. Ellwanger’s lady friend seems to think solferino is, let us put a brilliant King of Tom Thumbs nasturtium beside some of the purple-red sweet-williams (or the lady’s-slip pers of similar hue) and note the result.

Color Combinations. Passing now purple-reds, difficult color to manage at best, what is especially agree repellent in combinations of other less aesthetic hues. The Prince of Orange calendula is glorious in strong orange; such powerful color in the company of a deep blue like that seen in some asters is rendered crude in the extreme, although such a combination might be suggested by my wheel arrangement; but we must remember that color strength sometimes means a lack of color refinement, and this instance is an illustration of the fact. The same calendula with a perfectly white aster beside it is far more agreeable to the eye, because the color effect is refined. The Pearl nasturtium is a charming companion for the blue or purple centaurea (bachelor’s button), and the lovely soft yellow phlox drummondii is the prettier beside the pale violet-blue gilia. Any white flower with the coreopsis,
marigold, yellow or orange zinnia, yellow dahlia, centaurea moschata (suaveolens), and calendula is beautiful. No one can make a mistake by combining any color with white. What is most distressing in those mixtures of color which make us turn our eyes away, is the crudeness of uncompromising scarlets, yellows, pinks, blues, magentas, and purples; if all these were separated into distinct groups, each group having a liberal intermixture of white, undoubtedly we would not feel so distressed. Several color tones which are particularly uncommon, and which combine well with white, are seen in the following varieties of flowers:

Salmon-rose phlox drummondi, Black scabiosa, the New Cardinal-red poppy, lemon-yellow African marigold, magenta foxglove, Lady Bird nasturtium, pink bachelor’s button, the new Pure Gold calendula, and the purplish pentstemon.

It is always preferable to keep delicate tones of color together, and not mix them with powerful hues which are apt to overwhelm everything they come in contact with. Those magnificent crimson-red asters and the gorgeous purple ones are no fit companions for the specimens seedsmen advertise as veiled with rose, etc. The harmonizing of colors means not so much the gathering together of a large number of intense and brilliant hues and putting these into certain positions with regard to each other, as it does an absolute local banishment of conflicting hues which bring discord into peaceful communities of pink, violet, blue, yellow, or red.

Correct Color Terms.

I wish that we could adopt a more correct system of terms descriptive of color. Think how inconsistent are some of the
expressions in common use,—for instance, "a light shade." Light and shade are two exactly opposed conditions; and color which is delicate we should call a tint. Intense color we are apt to call dark, when it cannot be so unless there is black in its composition. A strong, pure color is better designated by the word hue.

When there is no brilliancy in a color and it is dark, we can properly call it a shade. The color of the King Theodore nasturtium or the black scabiosa we may rightly designate as a dark shade of red; we may call it maroon if we please, but maroon is a shade of red.

There are certain reliable terms which may be used for colors about which there should be no shadow of doubt. I shall try to use these as far as possible when speaking of particular varieties of flowers. The following list includes what seems to me all the necessary names for variations of color in shade, hue, and tint:—

First. Hues. The sixteen colors designated on the wheel.

Second. Tints. Pink. Pure (red greatly reduced with white).
   " Magenta.
   " Crimson.
   " Scarlet.
   " Orange (known as salmon).
Buff. Golden orange greatly reduced with white.
Straw color. Golden yellow " " " "
Sulphur color. Pure yellow " " " "
Nile green. Green " " " "
Pale blue. Blue " " " "
Pale violet. Violet " " " "
Pale lilac. Purple " " " "

Third. Shades. Maroon.
Old Gold or ochre. Olive green.
Indigo. Dark plum purple.
CHAPTER IV.

SOME JAPANESE ELEMENTS.

Japanese are extremely fond of flowers, and they are characteristic artists. A peep into the gardens of the Mikado's palace would be a revelation of beauty to us; but we would see no carpet figures in the flower beds there. Instead of wasting his time in working out decorative patterns in flower colors, the Japanese gardener tries to copy in miniature the beautiful things of nature. He delights in tiny cherry trees, dwarf pines, and charming little lakes scarcely ten feet across. He will show us a miniature palm tree fourteen inches high, and it may be fifty years old!

When he tries his skill on chrysanthemums, he produces flowers measuring fifteen inches in diameter! But in contrast with these he will show us a perfect little rose tree about eight inches high, bearing symmetrical roses not larger than a nickel! But best of all the Japanese artist appreciates the value of picturesque irregularity, and he trains his trees and bushes into shapes nearest approach-
ing those of nature. Can anything equal the unrestrained freedom of one of his sprays of cherry blossoms as we see it painted on a paper screen? He is familiar with every turn of a leaf and every curve of a petal; nothing has escaped his eye; he is content to give us nature just as he has seen it; we do not need to ask him what he would do in a garden; it is evident that he would still follow nature.

I believe then, that we ought to allow some room in our gardens for Japanese ideas. There is nothing which to me is more charming in spring than a small fruit tree in blossom, and of all things the pink and gray colors of an almond tree in full bloom are dainty and delicate beyond description; so lovely is the combination of these two colors that I wonder we do not endeavor to bring them together oftener. Once in a while I see a pretty girl in a pearly gray dress the sash and trimmings of which are a soft pink; but it is a color combination rarely met with, although extremely artistic and distinctively Japanese.

One of those charmingly irregular specimens which I consider a valuable acquisition to the artistic flower garden, is a small tree called the *Sophora Japonica* (a near relative of *Sophora cladrastis*), which has pretty bunches of white flowers drooping from the ends of its branches. From an artistic point of view, this dainty tree is exceedingly picturesque; it is very beautiful on the edge of a lawn; so also is the scarlet flowered *Cytunda*.
Japonica (familiarly known as Pyrus Japonica) as well as the rosy blossomed Diervilla Japonica (Weigela) either of which are charmingly irregular when allowed to grow naturally, but are prim and uninteresting when forced into the conventional lines of a hedge-row. There are beautiful specimens of both these shrubs in Prospect Park, Brooklyn, which have been allowed to grow in their own sweet, unconventional way. The Sophora Japonica holds a prominent place on the lawns of the Public Gardens in Boston.

The wistaria grows luxuriantly in Japan. I have an interesting photograph of a very old vine with enormous clusters three feet long, of the purple flowers, which has been trained to climb over the posts of a characteristic Japanese tea house, whose balconies overhang a mirror-like little lake below. Imagine the enhanced form and color effect caused by the reflection in the water! It is just such an advantageous position as this, seemingly unimportant when mentioned in passing, upon which the beautiful appearance of our flowers, trees, and shrubs depends. To many the wistaria may appear scraggly, and we will even grant that it is; but I shall immediately add that scraggly things are essential to certain artistic effects. The accompanying sketch shows a Chinese wistaria forced into regular shape. I question whether anything artistic is gained by such a method of floriculture. The tree is at Dosoris, L. I. The mistake which florists are apt to make,
is that they consider all things imperfect which are not more or less symmetrical. Is nature ever perfectly symmetrical? Most emphatically, no! Observe my sketch of the conventional looking horse-chestnut leaf; that is about as near as she cares to come to symmetry. If the florist created this kind of a leaf, or I may as well add the average American designer (who would have far less excuse for such a blunder than the florist), he would be very particular to make the leaves which are opposite each other exactly of a size. This is precisely what the Japanese artist would not do.

Even partial precision is oftener suggested by Nature, than followed by her; as a rule, she confines her regularities mostly to details; when it comes to the horse-chestnut tree, she only suggests a roundness of figure. But where is there any symmetry in the apple tree? There is certainly none in bud, flower, leaf, or branch; and the faintest suggestion of regularity in any of these is lost in the overpowering effect of picturesque irregularity, which is the abiding
characteristic of the tree itself. It is this freedom from restraint which the Japanese admire and try to copy both in their art and their floriculture; it is unnecessary to add that they are entirely successful in the effort.

Two other beautiful and unconventional specimens are the Japanese cherry, and the Chinese double-flowering plum (Prunus triloba). Both are characterized by the dainty pink and gray color effect I have previously alluded to, and I think no spring garden can be perfect without them. The double-flowering Japanese peach is a charming snowy blossomed little tree which will throw its whiteness into high relief against a dark background.

I must mention, also, that beautiful Japanese variety of the honeysuckle, Lonicera halleana, whose white, fragrant blossoms and dark foliage recommend it especially for the arbor with its romantic inmates—of course, an empty arbor lacks beauty as well as interest! The Chinese Matrimony Vine is another beautiful climber which to me always savors somewhat of Japan; there is a suggestion in both these charming vines of the trailing creepers we may see on almost any of the Japanese wall screens; for that matter, I consider both the morning glory and the wistaria characteristically Oriental, simply because they are so often and so well depicted by Japanese artists.

But it is not my intention to speak particularly either of
Japanese varieties of flowers, or those which resemble them in certain effects; I wish, rather, to call attention to the spirit of art which pervades all things Japanese.

**Japanese Ideas.** We might easily copy many a Japanese idea by the commonest means at our disposal. A tub painted white with a rough spray of flowers drawn on it in strong gray-blue; an old ginger jar filled with Thunbergia or Virginia stock; a stunted, but vigorous little Norway pine set out in a green-painted tub; a rustic arbor embowered in wistaria, with a Japanesque table inside suggestively inviting one to sit by and call for a cup of tea; and perhaps a curious dragon* sprawling over a terrace, with his back all gold and green in Lady Bird and Golden King nasturtiums,—these are the elements which, more than actual Japanese plants, will give the garden an air of Oriental grace and beauty. I need hardly suggest that a flagstaff of small dimensions is an essentially important accessory; a banneret adds much to the garden's cheer. Then, too, what an element of beauty the Japanese lantern will contribute to the garden if we will afford it opportunity! At twilight nothing can possibly be prettier than the effect of a few ruddy, glowing lanterns hung over a bed of white lilies; Candidum, Harrisii, or Longiflorum. I speak of this because the flower garden is rarely seen under all possible conditions of its beauty, and one may imagine that when daylight

* For its description and that of other garden accessories of a Japanese nature, see chapter entitled "Garden Furnishing."
is failing, it is losing its interest for us; but there is many a flower which is beautiful at eventide and which does not throw out its fragrance until then—Nicotiana affinis and Milla bisflora, for instance.

Japanese elements which are desirable for the garden include many such artistic trifles as these I mention. A rockery with a pedestal near it holding a fanciful wood and metal lantern is precisely a thing so beautiful in effect that no body can forget it. We remember that the word “impression,” so carelessly used, and so often carrying with it an idea of superficiality, means in truth a lasting memory; and when one produces by artistic means the right impression at first, some one else is apt to carry the memory of it all through their life! then it is that the saying comes true—“A thing of beauty is a joy forever.” I think the Japanese try first to produce impressions in their art work, trusting that all good things will follow after.
CHAPTER V.

GARDEN FURNISHING.

The manufactured articles of common use in and about our houses to-day are not in any sense artistic. Art and manufacture, except in Japan, rarely go hand in hand; nevertheless, the industrial arts of these times are far in advance of the position which they held twenty odd years ago, when Sir Charles L. Eastlake began his crusade against the abominable shams which met our eyes in the best appointed households.

Change and innovation, however, has not extended to outdoor objects. Architectural gardening is reserved for the broad estates of the wealthy, and nothing seems to be done for the garden of small proportions. One who wishes to furnish the tiny garden space with artistic but inexpensive objects will find it a rather difficult task. It is one thing to furnish a parlor or bedroom, it is quite another to attempt the furnishing of a small garden! and the latter must contain at least a few of such things as tasteful vases, boxes, tubs, seats, benches, pedestals, fountains, statuary, lanterns, and flagstaffs.

It is possible, though, that with a little money and good taste we may create many attractive small things, and some extensive ones which will prove perfectly artistic. Common wooden pails (notice the initial above) painted cream color, with yellow on the iron hoops, may be had for a few cents, and
these, furnished with brass or bronzed iron drawer pulls, are as pretty as they are useful for plants which we may wish to retain potted. The common unglazed terra-cotta pot, like my sketch, is not without good form and color; the little square box shows what can be done with a common, but strong soap-box, bound with metal hoops studded with brass-headed nails; the legs are made of the ends of old wooden curtain poles. The box is painted cream color with yellow ochre trimmings.

Two very sensible and neat tubs may be cut from a good sugar barrel just above the second row of hoops; these tubs, painted green with the hoops black, and placed firmly on a section of Ackron drain pipe, furnish an excellent setting for dwarf nasturtiums, petunias, and phlox.

The edges of flower beds are artistically satisfactorily bounded by pressed brick set up on end. Yellow (Dutch) brick are even better in color effect than red. This same yellow brick can be obtained with a moulded edge like my sketch, and it will furnish the material for a very pretty fountain edge. Unfortunately, statuary is an expensive luxury, which few of us can afford. Nearly everything modern, particularly in cast iron, is bad to a most unqualified degree; better nothing in our gardens than anything bad which pretends to be a work of art. The models of old Grecian sculpture,
which may be had in plaster for moderate sums, are peculiarly appropriate in the garden belonging to a house of the colonial type; these, when covered with the enamel paint-preparation now in use, of creamy white color, and tinged in the interstices of the modeling with rusty yellow, are proof against the ordinary storms of spring and summer. In autumn they should be removed to the shelter of some outhouse.

Plaster casts of the Marble Faun, Narcissus, Venus de Milo, Eros, and the Dancing Faun may be obtained in both New York and Boston; these are excellently modeled, and are particularly adapted to the embellishment of a garden.

My sketch represents a Grecian style of pedestal, simple in pattern, inexpensive in cost, and made of wood and plaster material obtainable in either of the large cities mentioned. Nearly all the beautiful buildings at the World's Fair were covered with this plaster composition; it needs a thorough coat of oil, and then several coats of cream colored paint, and it is absolutely weather-proof.

My drawings of a Grecian garden seat and a pedestal for a bust are designed for wooden construction with ornamental details in this stereo-relief material. The railing and newels are also constructed of wood painted cream color, and the shallow terrace steps (set in
cement) and the walk are laid in yellow brick. The effect of the cream and yellow colors, with the surrounding foliage and flowers, is quite refined and beautiful. This woodwork can all be constructed in sections and fastened by irons to the brick work. If removed and placed under shelter during the winter storms such seemingly frail material will last for an indefinite period.

My drawing of a garden lantern* is a copy, in part, of one of the bronze and stone affairs seen around the beautiful temples in Japan. The sides of the lantern are furnished with white cathedral glass, the top is made of tin painted dark green, and the sides and base are constructed of wood painted dull yellow and white, to suit the colors of the house and its surroundings. The lantern is fastened to the top of a tasteful newel-post, an ordinary glass kerosene lamp being placed inside. The effect of the lighted lantern in the evening among the lilies and roses is charming.

A Dragon. A rather difficult object to construct, but one which is delightfully novel and grotesque, is a

*See also the sketch of a lantern in chapter on "Japanese Elements."
Japanese dragon arranged to sprawl gracefully over uneven ground near a rockery. The method for constructing this fantastic creature is this. Stake out the plan of the space he will length nine feet, width about ten at the thickest; board up the like a square, tapering trough, nailing the boards to the stakes (this space is to be filled with good loam in which should be planted yellow and gold nasturtiums); then get a carpenter to cut about two dozen ribs (assorted sizes), nail these on either side of the trough as my sketch indicates, and perfect the rounded form by nailing on lengthwise common laths; over these his skin may be stretched and tacked on,—common white canvas will do; this should be oiled afterward and painted like fanciful scales in several tones of green. For the legs, tail, and head, use wood and Portland cement mixed with half its amount of fine sand. It will not be found a very hard task to model over sticks and broken bricks a sufficiently terrible looking head (alligator-like) and sprawling claws; paint
these parts like the rest of the body. In summer this flowery dragon filled with bright Golden King and Lady Bird nasturtiums is indeed a novel and pretty sight. The plants should be clipped to keep them in general conformity rounded figure of the dragon.

An interesting and quiet corner of the garden should be furnished with a seat. My sketch suggests a simple, painted affair, which we can make ourselves. Nothing is uglier or more uncomfortable than those cast-iron monstrosities one frequently meets with in cemeteries and artificially appointed parks.

Little rustic or Japanese seats like those suggested by my sketches are very appropriate snuggled away in a sweet corner embowered with honeysuckles or morning glories. Those of us who are familiar with the pictures of St. Mark’s Square in Venice will remember the ornamental flag-staffs which stand before the cathedral. The copied in Central Park, and in the beautiful Renais opening on the lake are the same kind of flagstaffs, from which float pretty bannerettes.

In a good-sized garden, where there is an open space, a
flagstaff or two in pattern like my sketch will greatly enhance the artistic effect. They need not be tall, and the bases can be simply constructed of stereo-relief and wood. The poles should be painted red and the iron tops gilded.

An Old Boat. In a country-house garden it is a pretty sight to see an old boat, no longer of use in the water, furnished with such cheerful occupants as ragged sailors, coreopsis, white gladioli, and white phlox drummondii; but I question if there is anything worthy of notice in an iron pot suspended from three rustic sticks. A camp-fire does not associate itself consistently with flowers, but a boatful of flowers, even on a lawn, is quite sensible and in good taste.

As for rustic work, we need more of it, and it should be revived with a new element of simplicity attached. The picture which forms the frontispiece, of a simple seat and fence beside the edge of terraced grounds is suggestively free and simple in artistic arrangement. The sweeping lines of the old apple tree are full of grace, and harmonize perfectly with the straight ones of the fence and seat below.

The little rustic bridge with its resting-place half-way over is a pretty affair for a garden which has a pond or streamlet; if rustic work is employed in these
directions it should be wisely introduced in all the appointments of the grounds.

**Rustic Work.** Rustic work is not beautiful when a great number of perpendicular lines are introduced in the design. The charm of the rough and natural wood is best displayed when the lines are disposed in angles, and the spaces in superficial area are only a little in excess of the woodwork. In explanation of this fact, I need only draw attention to some of the best specimens of Moresque ornament, which will show that the designer was very careful not to allow his pattern to occupy any more room on the wall than the spaces between left untouched.

My section of a fence will demonstrate the idea perfectly. The number of square inches in the spaces is about the same as that which the woodwork occupies.

There is a great deal of Majolica pottery manufactured nowa days for the garden as well as the house. Some of it is very pretty, much is tasteless, and mostly all is expensive.
CHAPTER VI.

ITALIAN AND ENGLISH GARDENS, LANDSCAPE GARDENING, AND SHRUBBERY.

The gardens connected with the old villas and palaces of Italy even in their present state of decay afford much that is interesting and instructive to those who would learn about formal gardening, and gardening in that broader sense to which we apply the name "landscape."

Landscape gardening, however, is almost beyond the compass of so small a volume as this, which has more directly to deal with the beautiful things of the flower garden itself. But we must not forget that even in the smallest plot of ground devoted to the culture and display of flowers there is always present an element which approaches the sweeping effect of Nature's arrangements of flowers, trees, hills, meadows, and stretches of water; in fact, we can always find a bit of nature (sometimes not over four feet square) which contains points of beauty eligible for the carefully planned small garden. This kind of natural arrangement can hardly be found in the old Italian gardens; their beauty is rather that of a studied, formal order, which only gives way in the backgrounds to anything approaching the freedom of nature; but formality, whether it be Italian, English, or Colonial American, is quite a necessity of the small garden; it only remains to point out what the nature of that formality should be.

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In walking through the elaborate gardens of the Villa Pallavicini, near Genoa, I could find nothing but childish artificiality, except in a few arrangements of some border flower beds. But these grounds are all decidedly modern, and they show how differently the Italian gardener works to-day from the way he did a hundred or two years ago. The grounds of the Borghese and the d'Este Villas tell quite a different story; the old plans remain unimpaired by any modern innovations, and only age and dilapidation mar the beautiful effect of the whole. Perhaps for the artist this decay does not detract from the charm of the designs; for the gardener it certainly must, and we would do well to remember that the artistic part of these old Italian gardens belongs to their original plans.

In the sketch which I have made of the square reservoirs below the terrace of the Villa d'Este (Tivoli) we will see the value of the formal lines in conjunction with the free ones of the overhanging foliage. I need not point to the charm of perspective added to the straight lines which bound the water.

A Vista. In the Pincian Gardens, in Rome, there is a most beautiful vista from the fountain which it is worth while to remember was not pro-
duced accidentally, but by the design of the gardener, who knew that the little glimpse of St. Peter's Cathedral would greatly add to the attractions of his park. The advantage to be gained even in a very small garden by the introduction of foliage arranged so it will grow arch-like over some pretty little vista is certainly very great, and it is to such points as these that we must look for the art of the garden.

**Line Effects.**

The Villa Castello, near Florence, possesses perhaps the most interesting and beautiful one of all the Italian gardens of the Renaissance period; there is less ruin here, more artistic order, and more flowers. I give one little view of a path with a fine row of cypress trees beyond, and in between a beautiful arrangement of a close-clipped hedge, with the statuary which shows above it. One does not expect to see anything quite so Italian in our own country, but the wish involuntarily comes that we could produce effects in our American gardens as perfect in artistic beauty! There is a peculiar charm in the contrast of the white marble statuary with the towering, sombre foliage beyond, and the horizontal lines of the terrace and hedge are in admirable contrast with the perpendicular ones that
pervade the rest of the picture. Nature is replete with such effects, though they are not so formal.

In the grounds of the Villa Borghese is a fountain which always struck me as being particularly lovely on account of its perfect simplicity yet complete impressiveness. The margin is low and almost completely hidden by a border of little annuals not one of which is more than twelve inches high; in the center, the large marble basin is supported by four plunging horses, and the four jets of water fall in light, graceful curves, all the more noticeable by contrast with the straight lines of the water overflowing from the large basin. The central column of water gives added strength to the design, and one forgets that in the "City of Fountains" (as Rome is frequently called) this is one of the smallest and most unpretentious of them all!

A Simple Fountain.

It is hardly possible that a fountain will prove practicable in a very small garden, yet I believe we might readily possess one without incurring any great expense if we would adopt the proper methods of procedure. All the cast-iron affairs I have ever seen are monstrous and ugly; perhaps a simple, shell-like basin is least objectionable, but even this is ugly when painted green; it would be in better taste to give it the same color as the rest of the structure. It is a simple matter to build the fountain entirely of yellow brick, and use a vase-shaped piece of pottery for the water jet. Whatever there is of art which may be derived from the old Italian gardens we may be assured
will not be false to good principles. There is plenty of artistically colored brick manufactured nowadays, and I contend that such material is incomparably better than the falsity of cast-iron figures and forms which, alas, are too often seen in our American flower gardens.

**English Formalities.**

The formal English garden belongs to a period much later than that of the Italian Renaissance, indeed, scarcely more than a hundred years ago such a garden was in its prime. But the fact is, this formal English style of gardening drew all its inspiration from the methods that long years before had been practised by the Italians. One may see in the books illustrated by Kate Greenaway and Randolph Caldecott just this primness of garden arrangement which I allude to as being characteristically English. Instead of stopping at the very formal "parterre" the English carried their conventionalities further and left no part of the garden which was not regularly laid out by a foot-rule! English box hedges bounded everything, and trees and shrubs were cut and trimmed into the most fantastic shapes, much as the French poodle's wool is clipped and rosetted! At last came a reaction, and artists and poets preached a new gospel of informality and naturalism. Then paths became curved, parterres were obliterated, shrubs were no longer clipped, set flower beds were changed to irregular ones, and gardeners endeavored to bring everything back to "a state of nature." But it was only in Japan and China that such methods of gardening were brought to artistic perfection.

**Picturesque Gardens.**

To-day, what is most beautiful in English gardens may be found beside the picturesque little cottages so often painted by that master of English country life, Birket Foster. The perfect simplicity of the cottager's little flower garden
so admirably arranged that it defies every principle of rigid formality is quite as beautiful to the artist as many a Japanese one. The influence of this unsophisticated way of growing a lot of pretty flowers in a small space, where they are allowed to develop in their own wild and wilful way, is already making itself felt in this country. There is no exaggeration in saying that Swinburne, Rosetti, Burne-Jones, Oscar Wild, and Millais drew much of their inspiration from such a humble source; and the American gardener to-day might learn a good lesson if he should turn his attention in the same direction. We may find our own artists interested in the subject, and it is curious to note the beautiful bits picked up here and there in the byway gardens of old England by Edwin Abbey and Alfred Parsons, whose charming pictures we are all familiar with through Harper's Magazine. But some one may ask, "Where is there any art in English gardens?" In a word, I may as well answer that where the artist finds some particular arrangement and material adapted to a
picture, we may be sure that art already exists; it does not really begin on his canvas, but at the point in nature which he selects as a subject for his picture. There is a most clever drawing (which I reproduce) from the pen of Alfred Parsons which illustrates this idea perfectly. There are two beautiful groups of sunflowers in the foreground, to the left is a bit of picket fence with a suggestion of some nasturtium vines below, in the center is a glimpse of the almost overgrown path, and beyond are two thatched cottages whose walls and sheds are covered with honeysuckles and climbing roses; the sunflowers are in bold relief against the dark background which the climbing vines afford. Certainly this arrangement is perfectly artistic, and it is a suggestive one for the gardener who usually prefers to see the sunflower hold a back seat in the well-ordered garden!

Now, to make a practical application of the principles which these foreign gardens demonstrate, we should make a judicious selection of trees, shrubs, and flowers with particular regard to form and color; then the garden should be planned with these forms and colors ever in mind. There is not nearly room enough in this little volume to explain how each tree, plant, or shrub should be artistically disposed of, but a hint in one or two cases may serve as a general guide.

Shrubs. The snowball (I like the American variety best) needs a dark background, or a neighbor whose form is entirely contrastive with it, say, the Irish yew, or a well-formed common cedar. Such shrubs as the Syringa, Diervilla Japonica, Cydonia Japonica, Forsythia viridissima, Spiraea prunifolia (Bride's Wreath), Acacia, Althea, Silver Bell, Deutzia, and Spiraea splendens, all need either a woody background or some isolated position where the irregular or trailing charac-
ter of the bush may be fully displayed. The beauty of such shrubbery is lost when the specimens are crowded together in senseless confusion; three or four of the bushes seem quite enough to cluster in one group. Especially is Lespedeza sieboldi injured by too close a contact with a miscellaneous lot of flowering neighbors. Robinia hispida, the common rose acacia, can only be seen to advantage when its delicate sprays of flowers are relieved, silhouette-like, against something dark. A most charming specimen which comes to us from Japan is the Styrax obassia, a near relative of the Silver Bell; it is like the latter in the pretty, bell-shaped flowers, but more beautiful and not so common in this country; this is another shrub which deserves a vantage point in the garden plan.

Evergreens. As for the evergreens, I think they are worthy of a very prominent position in the beautiful garden, not only because of their conventional forms, but for the reason that in winter we have the advantage of their greenness. What is more beautiful than the snow-laden boughs of a full formed hemlock! I notice that Mr. Falconer, of the famous and beautiful Dosoris Gardens, has a most interesting collection of evergreens on the place, and I regret to say that one of the loveliest specimens, the Irish yew, he does not give us much encouragement to cultivate. He says it is not reliably hardy in the North; but we are advised rather to try the Japanese variety (Taxus cuspidata), and also T.
repanda and T. stricta. It will be seen at once, upon glancing over the sketches in this book, how much I value, for artistic reasons, the tall, conical shapes of such trees as the Irish yew. It is not necessary to point to the fact that in Italy and Normandy the great charm of the landscapes is directly due to the force and contrast which is contributed by such tall perpendicular characters as the poplar, cypress, and ilex. It is a pity that the Normandy poplar does not thrive in our rugged New England climate; there is no spot where it could possibly look handsomer with the surroundings than in any one of the southern valleys of the White Mountains; yet the few specimens I have seen thereabouts are struggling for bare existence.

Other evergreens worthy of mention are, the Cracow Juniper, Abies concolor, Abies nobilis, the golden Chinese arbor vitae, and Kämpfer's Chinese larch. I also have a great fancy for the coarse, long-needled Norway pine (so-called) common in the northern parts of New Hampshire, and our common hemlock. One of the most beautiful and conventional evergreen specimens, which may be seen any time at a florist's in some one of our large cities, is the California laurel tree; it is peculiarly adapted to terrace or piazza decoration.

Consistency. Landscape gardening must really depend for its success upon the exercise of common sense, which is another expression for good taste; one must not attach to a house of the Colonial pattern a garden of the unconventional English cottage type; and we do not expect to see in the wilds of a mountain district
either house or garden laid out on lines of classic symmetry. What we should expect is consistency, no matter what style of architecture may be in vogue.

A garden which boasts of any landscape element must fit exactly into its surroundings without having the appearance of labored attempt! One great charm of the incomparable design of Central Park, in New York, is the fact that one is unconscious of the sharp transition from formality to informality in following its admirably laid out paths. The impressive, straight mall ending at the grand staircases leading to the plaza on the lake is in admirable contrast with the naturalistic arrangements on the path called "The Ramble." The work of Frederic Law Olmsted in this splendid park, and in the World's Fair grounds, is of a kind so matchless in excellence that we would do well to give it our closest attention.
CHAPTER VII.

BULBOUS PLANTS.

EARLY all the flowers of spring which are brilliant in coloring and effective in form, proceed from bulbs. There are quite a number of summer blooming plants which are also bulbous, and to these we owe much of the strong color which gives the garden an effective appearance from a distance.

**Stately Flowers.** Beginning with the snowdrop (a great favorite with the poet), there is an endless list of gorgeous flowers ending with the stately dahlia, all of which proceed from bulbs. Speaking of the dahlia reminds me of the following suggestive lines of Mrs. Sigourney. What a contrast the drooping, regal dahlia presents beside the white-souled, hardy little snowdrop!

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"I have no stately dahlias, nor greenhouse flowers to weep,
    But I passed the rich man's garden and the mourning there was deep;
    For the withering flowers all drooping hung amid the wasting sod,
    Like Boadicea bent with shame beneath the Roman rod."
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The character of a flower **must** be taken into consideration when a particular position is allotted to it in the garden. I should never plant dahlias near sunflowers nor lilies beside either; these, so to speak, are flower queens, and they require subjects for their surroundings; not royal rivals! There is no reason why the dignified dahlia should look mournful unless it is overcome by the haughty, unsympathetic company of some over-aristocratic neighbors,
who, like itself, are suffering from the neglect of an owner who has more gold than love of flowers! Here is a lesson we may all of us learn to our great advantage; we invest in costly orchids, lilies, roses, and chrysanthemums, and utterly neglect such humble things as snowdrops, crocuses, scilla, and daffodils. The garden in springtime is not beautiful without these charming little characters.

The snowdrop and the pretty blue scilla should be planted in some irregular grass-plot, and sparingly on one edge of the lawn. Scilla siberica and campanulata seem to be perfectly hardy, and I have a great admiration for their blues as seen against the green grass.

All the large trumpet-shaped single daffodils are graceful and beautiful. Mr. Fewkes in his cultural directions will tell us which varieties are best to cultivate. I need not add that beside a pond or any small bit of water daffodils and narcissi are particularly charming. The Polyanthus varieties are so dainty and beautiful that they can be recommended without reservation for almost any position indoors or in the garden; they need careful covering, and with a little attention will prove quite hardy where the winters are not too severe. The color tone of the sweet little flowers is of a kind which does not conflict with either strong-colored or large-formed neighbors. Crocuses of all colors can be planted indiscriminately together; there is no want of harmony among them. When one may obtain no less than two hundred bulbs for about $2.00 it seems as though there ought to be plenty of
these bright-cupped little things in the spring garden! They belong in a natural position beside irregular walks, and beyond the environment of formal beds. I should plant jonquils in the same locations; nothing is more tiresome than quantities of these spring flowers arranged with mathematical precision in geometrical flower beds. We need to learn that there is more than one way of displaying flowers without making it perfectly apparent that they were arranged for inspection. It never seems to occur to the gardeners in whose care we place our public parks that a lilac or weigela bush can be companionable to a group of daffodils or tulips! On the contrary, a background of beautifully colored, budding foliage is left to complete its own harmony of color, and the grassy lawn is mutilated to find a place for the gorgeous tulip with results which are, to say the least, violently inharmonious.

The Duc van Thol tulip, all the varieties of which flower simultaneously, is a hard character to manage in the direction of color harmony. I must refer to the chapter on this subject as the best means for guidance in the laying out of tulip beds. I may incidentally mention several good combinations of certain varieties. The white Joost Van Vondel with Wouverman; Duc v. T. white with Pottebakker scarlet; Viridiflora Praecox with purple crown; Duc v. T. white with yellow; Proserpine with Queen Victoria; and the Parrot tulip with any late flowering white one. A
winding bed of variously colored tulips, with plenty of white ones as a harmonious medium, is in excellent taste; and in very formal flower gardens where there is a little raw green in the shape of a close-clipped lawn (which furnishes an undesirable background) the "parterres" may be filled with these brilliant flowers with good effect, especially if the closest attention is given to color harmony. But I must deprecate the practice of filling such beds with regular arrangements of the narcissus, tulip, and hyacinth; this is bad taste for no than it brings many showy flow enough plain re method of work with that of cer designers, who gether with sense give the eye no uneducated and not know the and bare, mono garden we must our ornamented sity of a restful

Hyacinths may be near tulips and daffodils, but I prefer to see them relieved against neighboring shrubs, or such low-toned green as that which the periwinkle will furnish. I like to see the variety which an occasional bit of partridge-berry vine contributes to the garden; perhaps if we would properly estimate the value of such simple material,
the artistic effects we desire would be forthcoming without
the expenditure of so much elaborate effort.

Among the summer-flowering bulbs there
are several which the garden can hardly
dispense with. These are: Gladiolus,
Milla biflora, Bessera elegans, Hyacinthus candicans,
Zephyranthes, Tigridia, Tuberose, Canna, Dahlia, Crinum,
Amaryllis, Anemone, and Spiræa Japonica. I have tried
all of them in my own garden with resulting success, and
not one will prove unworthy of any attention bestowed
upon it.

The gladiolus is too common a flower to
need any description; but a few hints
about its position in the garden may be of aid to those
who contemplate using it in a broad way.
The great advantage the gladiolus holds
over other flowers is that it takes so little
room; the bulbs need be placed only four
inches apart. I cannot find words strong
enough to express the wonderful intensity
and delicacy of its colors. The common red
variety, which can be bought for about fifteen
cents per dozen, possesses a powerful and brilliant color
close to scarlet, but having a greater depth; the yellows
are tender and delicate to a perfection unequaled by any
other flower; the lilac tones are like those in a sunset
sky; the horticulturists would force the paler tints into
an insipid white, and the remarkable pencilings in pearly
colors remain unappreciated; then, too, what the gladiolus
can produce in pinks, salmon tints, and cherry reds is only
equaled by that prince of all red and pink flowers, the
carnation! As for the other colors, I can only add that
they are beautiful beyond description, whether pure or
broken in tone.
One thing, however, must be borne in mind, and that is, that the orangy and broken pinks are no fit companions for the pure ones; and I hardly consider the pale yellow colors harmonious with any of the pinks or reds. Perhaps the lilac tones are best suited to the yellow ones; but on the whole it seems as though the gladiolus is especially adapted to the companionship of other flowers with whose forms and characters it presents a wide contrast. With an environment of gaillardias, white asters, pearl nasturtiums, or white candytuft, the straight, sword-like leaf with the spike of glorious flowers above is in charmingly good taste. On page 74 we may see the pretty effect of some almost pure white gladioli combined with golden gaillardias and white balsams. Unfortunately, the photograph does not give an adequate idea of the color effect; but it does show how tasteful the position of the perpendicular spikes of flowers is beside a rough rustic gate. In another picture, facing title, we may see the pretty effect of the gladiolus beside a piazza newel-post.

We must not be contented with only a dozen or so of these splendid flowers; next to some of the free-blooming annuals the gladiolus will yield a very large number of handsome and showy flowers, and the best of it is, all the buds will expand to the topmost and last one when a spike is cut and placed in a vase of fresh water! In the finer varieties several flower spikes proceed from one bulb, and the blossoms almost completely encircle the spike; whereas, in the common variety the flowers are smaller, and are on one side only of a single spike.

Milla Biflora and Bessera Ele-gans.

Milla biflora is a remarkably sweet-scented, star-shaped flower which I like to see planted among such contrasting neighbors as pearl nasturtiums, salmon-rose-colored phlox, or blue gilias. It takes no room, and the two or three grass-
like leaves which proceed from the bulb really need the support of a rounded, compact little plant close by. The same is true of the Bessera elegans, whose drooping flower-bells are whitish vermilion-orange in color. I cannot praise too highly this delicate orange-red tone of color, which is pumpkin-like, only not the least bit crude. For its neighbors I should choose dwarf white asters, pearl nasturtiums, white phlox, Victoria bachelor's buttons, or white candytuft.

**Hyacinthus candicans.** Hyacinthus candicans is an interesting, tall specimen with the character of a question mark; most everyone asks what it is! We should be satisfied with its pretty effect among beds of purple candytuft or sweet alyssum, without asking for the perfume which we generally associate with the hyacinth in spring. It is altogether different, and is remarkable for its long, green leaves, its flower of drooping bell-shaped figure, like the snowdrop, and its flower stalk, which sometimes attains the height of four feet. A half-dozen bulbs planted in the center of a small, circular bed, with a surrounding of dwarf magenta petunias, give a pleasing color effect.

**Zephyranthes.** Zephyranthes rosea is a favorite with me, although I regret to say it adds but a penny's worth of color to the garden. Unfortunately, a few bulbs give a few flowers, and I can only recommend it for its pure pink color and lilylike form. The six bulbs I had last season gave me six dainty flowers which bloomed at various times through July. A pretty neighbor for the
flower is the plumed Spirea japonica, whose foliage and flowers are excellent as a background for the rosy zephyranthes.

The Tigridia is an incomparable beauty! Perhaps that statement sweeps before it all remarks in detail about the flower, or, for that matter, the flower garden itself. Of course, the rose and the lily must be jealous of such praise given to a comparatively unknown new-comer—a presumptuous interloper! but comparisons are not always just; and, in truth, the tigridia ought not to be compared with any other characters in the garden.

There is a spottiness about the center of the flower which reminds one of an orchid, but here the resemblance ends abruptly; the general form suggests the iris, but where is the outline that the French artist saw in the iris which suggested his conventional "Fleur-de-lis"? and what flower except this possesses a translucent scarlet? Not one that I know of. Scarlet is one of the most opaque of all colors.

So, I must repeat that the tigridia is incomparable. It is easily grown, and it never tires of sending out flower after flower all summer long. The white ones are particularly dainty, and one wishes the blossoms were more useful as cut flowers; but even out-of-doors they do not last much after one o'clock when the sun is hot. However, this beautiful flower, which comes to us from Mexico, does well in the high altitude of my own northern garden, and it will thrive almost anywhere with little attention; no garden should be without a goodly group of the bulbs, which may be planted four or five inches apart. By no means allow
any magenta or crimson flowers in the neighborhood of the conchiflora variety. The tuberose is a good companion for all varieties, and its intensely sweet perfume is quite in place in the open air and beside the odorless Mexican flower, but is oppressive in the house. Tuberoses need to be started in the greenhouse, other wise they will bloom very late or perhaps not at all.

**Cannas.**

I particularly like the Madame Crozy and the Alphonse Bouvier Cannas. I have no doubt but what there are many varieties which are quite as excel for cannas, I like just the two which these especial varieties contribute to the garden. The particular charm of the Madame Crozy is its superb vermilion edged with a thread of golden-yellow. So far as the foliage of the canna is concerned, the bronze-green color of some of the tall varieties, notably that called Robusta, is certainly much to be desired for effect in the background of the garden.

Unfortunately, both the handsome Amaryllis and Crinum are a bit difficult to cultivate, and are expensive. They are magnificent to look at, both in the house and out-of-doors; and if one can spend the time and money upon them they offer grand opportunities for artistic arrangements in large, showy jars intended for the terrace or the formal garden. Amaryllis Johnsonii and Formosisima
are less expensive varieties which are adapted more to naturalistic arrangements. The variety named Belladonna major is so beautiful in rosy white color that it deserves a prominent position in a flower pot or jar where one can reach the flowers to inhale the delicate odor. All of these bulbs should be started in the greenhouse.

Anemones. Anemones are suited to some natural arrangement near a woody spot in the garden. I like the single varieties the best, Coronaria being particularly delicate in character. Here again is an element of simplicity and natural beauty which the well-ordered garden ought to contain.

So much might be said about the dahlia that adequate attention to it in this little volume is about impossible; we may be really glad that the interest in this splendid old-fashioned-garden flower has revived. Its foliage is thick and effective, and its flowers rival in glorious color the queen of all the late comers—the chrysanthemum. It does not make much difference what the character of the variety is, its flower is beautiful. I hesitate to mention any one in particular lest some beautiful, well-known specimen should seem neglected; but of the kinds most familiar to me I might (with confidence in their perfect beauty) mention Little Hermon, Rising Sun, Snow Cloud, Duke
of Connaught, Rob Roy, Boabdil, La Phare, Isabel, and Little Leopold. Whether Pompon, Large double, or single flowered, the variety is of no consequence, as it is the individual flower which is really beautiful. In color the dahlia runs through every imaginable tint and hue, except blue and its tonic (if I may be allowed the musical term) associates. Strong, pure orange it avoids; but pure yellow and rich maroon it delights in.

In arranging the position of the dahlia in the garden, I should take into account its bushy character of foliage; this is so luxuriant that there is no danger of the flower colors clashing with each other. The flowers are apt to come so late that it is quite necessary to start the bulbs in the greenhouse; they need lots of room out-of-doors, and they may be either planted in groups quite by themselves, or placed beside a cluster of tall, white flowers like gladioli or lilies, whose figures will be splendidly relieved against the sombre foliage.

Among perfectly dark flowers, except the King Theodore nasturtium, the Black scabiosa, and the Black pansy, the dahlia will contribute the best of all rich color tones; there is no chrysanthemum which can equal it in intensity.
CHAPTER VIII.
ROSES, LILIES, CARNATIONS, CHRYSANTHEMUMS, AND ORCHIDS.

Here is a popular notion that the rose and the lily are competitive for the highest esteem of flower lovers! Whatever the comparative merits of the two queenly flowers are, we may justly concede the first place to the rose, at least in the American garden; I think we may easily find twenty roses to one lily in our own homes.

I hesitate about revealing certain artistic predilections for particular varieties of the rose, because they will not benefit the beautiful garden in any way. So we would better refer to Mr. Fewkes for practical advice about the flower. As for planting it in an artistic way, I have only to say that unless the habit of the particular variety receives close attention, something may be done which will spoil not only the rose-bush itself, but its appearance in the garden as well. Allow the climbing rose to climb in the direction chosen by its vigorous shoots, and subordinate its surroundings to the shape it takes; give the bushy foliaged rose breadth of space, and allow the slim, wiry-stemmed plant the support and relief which a garden fence will afford; in this way the best effects are obtained, and the bush forms a natural part of the garden plan. I do not see any reason why different varieties should be grouped
ROSES.

together; cultural facilities are not to be mentioned in the same breath with artistic considerations. If it is easy to take care of two bushes planted side by side, it is also possible that their proximity to each other will prove artistically undesirable. I think that the rose-bush possesses a character which adapts it to companionship with plants of an entirely different nature. The beautiful little yellow Scotch rose, for instance, is not a good neighbor for the Rosa Rugosa; but some white lilies it is quite in place. The Mary Washington and Queen of the Prairies are both climbers, which most certainly ought to contribute to the contrasts ordered so-called receive except it is of form in the well garden; and why a rose garden should any artistic consideration as an expedient, I am sure hard to say!

Semi-wild Roses. I rather like the semi-wild character of some of the less supercultivated roses; they contribute a large share of the interest which belongs to an artistic garden. The Rugosa rose is indeed a prize, with its charming single flower, and its extraordinary, luxurious foliage; the old-fashioned Damask rose, long since resigned to a half-wild condition on the edges of some of the farm-house gardens in New Hampshire, is to
me quite as desirable as many a fashionable rose like the Meteor, or the American Beauty. My sketch will show something of its unconventional character; but I must not slight the excellence and hardiness of several beautiful specimens which no half-wild rose will take the place of; I refer to my favorite, the Magna Charta, and to Jules Margottin, Baroness Rothschild, Malmaison, Hermosa, General Jacqueminot, Mrs. Degraw, and Alfred Colomb.

As for the beauty of the charming tea-scented roses which one may see at the large florists' stores nearly all the year round, it makes one feel badly that they are not all hardy, and do not thrive beyond the shelter of the greenhouse. But such characters possess an ineffable beauty in the presence of which we must acknowledge ourselves overwhelmed with admiration. Under the circumstances then, those of us who can do so should attempt the cultivation of at least two or three specimens. I refer particularly to the varieties named Mermet, Waban, Bride, Cornelia Cook, La France, Marechal Niel, Madame de Watteville, and Madame Hoste.

If the rose is to be considered first as the queen of the garden, then it seems as though the lily should be king, although such a term is not in consonance with tradition; we think of both flowers as queens! But some of the later acquisitions of our gardens belonging to the lily family certainly have a masculine stateliness, as, for instance, Lilium Auratum, and Lilium Speciosum.

It is sufficient to say that the regal beauty of all lilies
entitles them to a foreground position, and the white varieties most certainly need a strong dark background. Even the little yellow lily, Hemerocallis Flava, deserves a position close to the garden path; and the charming lily-of-the-valley never ought to be relegated to the insignificant corner where I have most often seen it! No garden should be without L. Candidum or the other less beautiful, though popular variety named L. Longiflorum; it seems to me that a group of white lilies is especially desirable in a sheltered position where it may have a background of dark evergreens. A handsome, orderly hedge relieves the white flowers splendidly, and thick. Other ought not to be are old-fashioned, are, Tigridora popular tiger-lily of country wild Turk's Cap, L. Superbum, and L. Tenuifolium.

The Auratum and Speciosum lilies I like to see in handsome vases or tubs beside the main path in the garden, where one may get the most good of them. Unfortunately, they are not strong in the bulb, and one can never tell whether, after the first year, they will produce any more flowers; but, all things taken into consideration, I would rather purchase new bulbs
every year of the Auratum variety and throw the old ones away, than pass a summer without this magnificent, sweet-smelling flower. Good, stocky bulbs produce big plants with a crown of immense blooms, each one of which, when fully expanded, will measure eight or nine inches across!

The splendidly colored carnation seems to be a distinctive greenhouse flower; no one expects to see any handsome specimens outside the florist's window. But it is possible that with care and indoor nurture one may raise some of the handsomest varieties; as for color, the carnation stands first in rendering it absolutely brilliant and pure. Varieties which are particularly beautiful are:—Portia, American Flag, Buttercup, Grace Wilder, Lizzie M'Gowan, Daybreak, and Anna Webb. Some newer ones are—Ada Byron, Helen Keller, Nicholson, and Ophelia. There are plenty of hardy garden carnations whose mixed colors are tolerably harmonious; the pure pink should be separated from pale yellows and shrimp pink tones.

Chrysanthemum Shows.

When we call to mind an extensive chrysanthemum show, the variety in hue and form among the flowers is
perfectly bewildering; so magnificent is the display of gorgeous and aesthetic color, that we do not know which kind is most preferable, or which individual bloom most brilliant, or whether any are adapted to the amateur's needs! And soon, alas, we learn that the most beautiful specimens are not garden products! So the hothouse giants must pass without consideration here. Mr. Fewkes will tell us what varieties are best suited for the amateur's cultivation.

Among the most beautiful of the white ones are:
Ivory, Mrs. Alpheus Hardy, Domination, Niveus, Mrs. Jerome Jones, Moonlight, and Mount Whitney.


Red: Cullingfordii, John Thorpe (magenta and red), Alice Comley, Joey Hill, and Mrs. G. W. Childs.

Orange Flushed: Vesuvius, Harry May, Source d'Or, and Volcano.

As all chrysanthemums should be protected from the
frost, I would keep them in pots and arrange them in the garden wherever they would show to the best advantage; it is a fact though, that beyond the commonest hardy varieties, all will need the utmost care indoors. The little pompon varieties are particularly pleasing, and among these (the colors are aesthetically soft to a most refined degree) I like the tiny button-sized old gold, the terra-cotta, the dull magenta-pink, and the very pale yellow. These are all hardy.

As for the brilliant and reptilian-like orchid, it is another flower, less of garden than of hothouse cultivation. But I have seen no prettier sight than that of a graceful little affair like my sketch shows poised in mid-air between the climbing vines of a broad piazza, with the strange, pretty flowers hanging droopingly over the edge of the box, nor is there anything daintier than such a little rustic box attached to the side of a summer-house.

The Best Orchids. Mr. Forsterman, who knows all about orchids, claims that the best ones for the amateur are:

Cypripedium Spiceranum.
" Insigne.
" Harrisianum.
" Lawrenceanum.

The last named variety in contradistinction to the others
needs a warm temperature of say, 70°, and it will bloom twice a year. The other varieties require a temperature of not over 55°, and they bloom during the winter months.

The cypripediums need lots of air and moisture, and flourish best in sphagnum moss and perhaps a little peat or common garden loam. Artistically considered they are of inestimable value on account of their complete contrast both of form and color with other flowers. An exposure on mild days to the open air of the piazza is quite beneficial to the strange but beautiful flowers.
CHAPTER IX.

THE ANNUALS.

The greatest possibilities with color in the garden depend upon the annuals. A very green appearing flower-garden is not in the very nature of the thing a floral success. We want color, and all we can get of it too; if the annuals promise us a grand aggregate of rainbow tints, let us have them in plenty even at the expense of everything except good taste; they are prolific bloomers.

I do not need to amplify my statement. Let those of us who have any doubts of its truth try a summer with marigolds, nasturtiums, phlox drummondii, poppies, calendulas, morning glories, sweet peas, and balsams in exclusive possession of the garden, and see what the resulting crop will be: any eight perennials we may think of, will not produce a third of the number of blossoms that these annuals will.

The varieties which furnish the greatest show of color besides those already mentioned, are zinnias, asters, coreopsis, candytuft, celosia, portulaca, ten week stocks, sunflowers, and bachelor's buttons. As color factors, some others like ageratum, alyssum, brachycome, and silene, are not so important; but even these throw a strong color-tone into the garden, and a large bed filled with any one of them is very effective.
But I mention only a few annuals which seem to me particularly needed in the artistic garden. What about the others? There are fully fifty varieties which are deserving of the amateur's attention! Shall we pass the thirty which I have not particularly mentioned? If we do, we will miss some of the most beautiful elements of a beautiful garden. Eschscholtzia, sweet sultan, salpiglossis, linum, gilia godetia, scabiosa and tobacco (*Nicotiana affinis*), the shell flower (*Moluccella*), we cannot do without; and if we have not room enough to try them all in one season, we should not neglect them the next.

But we must consider each one of the annuals separately, and find what they have to offer us that is beautiful; we should be true to that beauty also, and place it in a position where it may be seen under advantageous circumstances.

So far as the culture of the annuals is concerned, that is mostly a simple matter, and a few hints from Mr. Fewkes will help us very materially toward a clear understanding of their needs. I have also drawn sketches of each little seedling, where this seemed necessary for the recognition of the tiny plant as it grows among the weeds. Many
of us have had the experience of waiting impatiently for a miscellaneous lot of incipient weeds and plants to develop so we might be sure which was which! Some of us have rashly weeded out garden beds and unwittingly sacrificed the plants with the weeds; perhaps these little drawings may help us to discriminate more exactly one from the other.

**AGERATUM.** The best of the three color-tones is the bluest one in the dwarf variety. It is called blue, but the real color is pale violet; a dilution of the violet in my diagram on p. 31. Place a bit of this ageratum beside the bluest of the bachelor's buttons, and the latter, which is already a purplish blue looks much bluer than our ageratum. This dainty, fuzzy little flower is excellent for producing color effects. The so-called blue variety (dwarf) is indispensable to the garden if we wish to strengthen our forces in blue; a bit of heliotrope will not go half as far as a bit of ageratum.

Of course it is customary to use the plant to define borders and certain figures; but why not mix it up with things of a like character here and there, and let it work out its own blue, or white, or pink color influence? I like to see the flower beside white alyssum, candytuft, or the pale yellow portulaca; at any rate, I would use it among little things, never plant it around a bed as an edging, and give it a few pale yellow, cream-colored, or white neighbors.

It is an easy plant to take care of, but must be started early; see what Mr. Fewkes has to say on this. I have
no particular fancy for the white or pink varieties, but I have no doubt that they would appear effective in the filling up of many bare corners.

**SWEET ALYSSUM.**

I particularly like the Benthami Compactum variety. It does not sprawl over everything near it, as some of the other kinds do. But there is nothing really beautiful about sweet alyssum; it is rather useful, and gives some pretty effects when used judiciously among other larger flowers. Its white is grayish looking and altogether too fine and fussy for any color effect in masses. As for the yellow variety (*Saxatile compactum*), a perennial, it is very lovely and well worth cultivating on account of its profuse yellow bloom, and its permanence. See what Mr. Fewkes says about it.

**AMARANTHUS.**

This is a plant which is especially valuable for foliage effects, and notwithstanding the fact that it has a coarse weedy nature, it is of greatest importance to the garden on account of its ornamental nature.

The varieties which I consider most attractive from the artist's standpoint are:

- Caudatus (Love-Lies-Bleeding).
- Melancholicus Ruber.
- Salicifolius (Fountain Plant).
- Tricolor Splendens (Joseph's Coat).
- Superbus ("Fire Brand").

Caudatus is charmingly graceful when it is arranged to hang drooping over some gray lichenized rocks; in fact a rockery is incomplete without it. Some of the other varieties are as interesting in leaf-markings as many a coleus I have seen. The amaranthus grows so rapidly and spreads its
leaves so broadly over a circle of from thirty to forty inches diameter, that it can be used indiscriminately in garden beds for effect and for the early shade it affords the young growing plants; it should be cut down as soon as it becomes an interference with the welfare of more important small seedlings. But the proper place for this striking annual, which originates from a tiny speck of a seed and develops into a great tree-like form with a stem as thick as one's wrist, is a spot where it can enjoy plenty of room and sunshine; a handsome specimen here and there among the more important flower beds is always in good taste, but nothing should come nearer it than eighteen inches. The "Firebrand" will be found very effective in flower beds, or on the edge of a lawn; one is impressed and delighted with the fresh coloring of its coleus-like leaf.

This is a peculiarly artificial-looking flower, although nature has painted it in a most simple way. Perhaps it is the complicated appearance of the whole plant rather than its flowers which gives it this unnatural look of having been made up of one or more commonplace garden
flowers. The foliage is thick, coarse, and branched like thin coral.

The varieties which help most in the artistic appearance of our garden are:

- Golden Feather
- Burridgeanum
- Eclipse

I notice also an immense quantity of the double chrysanthemum (*Coronarium*) growing in the dooryards of the farm-houses in the vicinity of my own summer home, and although I have grown very few of this variety myself, as there are many other good yellow flowers, it can nevertheless be recommended as a profuse and continual bloomer which will add unlimited gold to the store of wealth in a beautiful garden. The annual chrysanthemum needs a great deal of room, sandy soil with a moderate amount of phosphate, and unlimited sunshine. It is too coarse a plant to deserve a foreground position. The white double variety is quite as pretty as the yellow, and is charmingly creamy in color tones.

**ASTER.**

This is a great September flower, one which is so delightfully varied and comprehensive in hue that it does not seem just to speak of one variety without mentioning all. Here is a luxury of color: white, pink, pale and deep blue-purple, violet in several
tones, purple, crimson, bright red, and salferino. Perhaps the most satisfactory varieties in point of color are: Chrysanthemum Flowered, Comet, Victoria, Triumph, Truffaut's Perfection, Mignon, and Betteridge's Quilled.

These varieties which follow are particularly beautiful. Boston Florist's Bright Rose; a perfectly pure pink which we can only appreciate by actual comparison. Place beside this aster, a bit of salmon rose Phlox Drummondii, or a specimen of salmon pink Ranunculus poppy, and the purity of the aster's pink will at once become apparent.

**Pink Color.** Now place a pink morning glory beside the same flower, and note the difference; the aster's color is far more pure and brilliant. When the morning-glory is placed beside the phlox, the two kinds of pink speak for themselves, and the morning glory is at a discount. Next, there is the Prince of Wales Aster, magenta crimson; a color nearly like the magenta petunia which I have referred to in previous pages; then a Victoria (described as light blue), very pale violet or purple blue in color, and one pure purple in tone; and finally the Triumph, rich, light crimson-red in tone, which florists are apt to call scarlet; but there is absolutely no scarlet blood in the aster family. The white Victoria is creamy in tone, and the white Comet is pure white of a translucent quality, less pronounced in character. The white Comet when tinged with pink, is especially delicate and beautiful.
The distinguishing beauty of the aster is its conventional form; both flower and foliage are regular and precise in outline; the primness is rather old-maidish, but none the less delightful as well as restful to the eye. We forget sometimes that order carries with it a sense or impression of calm and rest. How often it is the case that we are distracted by the disorder and untidiness of a room in which we must read, write, or sew! I cannot draw too much attention to the fact that flowers are characterized by qualities and appearances which act directly upon our minds, and produce impressions which we would do our best to remember. The Ranunculus is slovenly and untidy in character; the marigold is prim, the lupin is graceful, and the gladiolus is tall and stately. Various qualities depend much which makes the garden really beautiful in the hands of an intelligent gardener. Who would think of placing poppies anywhere near asters? No two plant-forms are so opposite and unrelated as these. But the graceful little Bessera elegans, or the Milla biflora are dainty companions for the aster, although they differ from the prim annual in every respect. There are various kinds of differences, and our object in the garden should be to
get the two right kinds together. The conventional aster is too or
derly to hide in an irregular garden bed; or formal plot of ground near some
architect
usual details, is its proper envi-
ronment.

Unlike the other annuals, asters are not content with sandy
soil, a teaspoonful of phosphate, and frequent draughts from the
garden hose! If we wish to have healthy flowers we must give
the plants plenty of dark, rich loam from the cow-yard, and ammoniated food. We may
learn from Mr. Fewkes what treatment the aster needs, and which are the better kinds for amateurs to
cultivate.

BACHELOR'S BUTTON.
(Centaurea Cyanus).

This is a splendid little bright-faced character, which is cheerful even under the most adverse
circumstances. It will grow in the shade when other flowers will not; it will stand the hot sun, wilt a little, and immediately regain its vigor with the first bit of shade and a drop of cool water. It hardly asks for more than sand to flourish in, and it is a persistent bloomer. If one would know how large the flowers can grow, they must be picked and placed in a vase of fresh water; the increase in size two or three days afterward is very noticeable.

But above all I value the Bachelor's button for the beauti-
ful blue color it contributes to the garden; a blue, if not
quite perfect, at least very nearly so, as it inclines only one or two points toward the ultramarine. Let us compare it with the bluest aster obtainable and note its superior color tone. Then, too, place it beside a bit of blue gilia, and see how the latter loses all its color value!

Besides blue there are also many other charming colors which belong characteristically to the bachelor's button—white with pale pink center, the same with blue and also purple center, pink, palest blue with an edging of deeper blue, deep violet, pale violet, purple, purple with an edging of white, and a number of variations of these colors which are too numerous to describe.

The variety called Victoria is dwarfed and compact in growth, of a bright blue color, and flourishes under the same simple conditions as the commoner sort; but artistically considered, it does not seem to possess any advantage over the tall blue variety—certainly not in point of color. The smallness of the plant, however, recommends it for use in set borders, or formal flower beds.

I think that bachelor's buttons are seen to the best advantage when they are sown broadcast in a large bed of irregular shape, following the bend of some path. Blue, or blue and white, look better if not mixed with the other colors. I do not wish to be understood to say that the mixed colors do not appear well together; that is not the
case. The gradation of color in this flower from purplish-pink through purple and violet to an almost pure blue, is consistent with one of the most exacting principles of color harmony. But we must bear in mind that the simplest combinations of color are the safest; and a bed of blue or pink bachelor's buttons will look well in a certain situation where mixed varieties will produce a confused effect of color quite distracting to the eye.

The double variety is not altogether satisfactory. It does not come true from the seed. For that matter I do not think that a double flower is invariably better than a single one; certainly a great deal of character is lost in some flowers whose multiplicity of petals adds nothing either to color or form, and destroys symmetry.
CHAPTER X.

BALSAM (Lady's-slipper).

HE old-fashioned Lady's-slipper is so greatly changed by supercultivation that it is scarcely recognizable to-day. The large, rose-like flowers measuring over two inches across are very unlike the single, slipper-shaped blossoms we picked in our grandmother's garden in childhood days.

I know that many of us do not fancy the lady's-slipper because the flower is such an unsatisfactory one to pick; no stem! Well, that may be a great disadvantage in the balsam; but if we condemn every shortcoming in a flower, we will soon find ourselves with empty gardens and despondent spirits; it is better by far to shut one's eyes to defects, and open them to perfections. I do not think that I can name another annual which possesses such a perfectly lovely snow-white appearance as the white balsam. Even the charming white Victoria aster does not compare with it in effect. I do not mean to say that the balsam is snow-white; it is really creamy in tone, with an appearance of snowy whiteness; but the whiteness of an aster is cold and hard, and there is also the defect of the compromising central yellow boss which occurs in many specimens.

There is but one road to success with balsams; they
must be cultivated from the very choicest seed. I make this assertion after considerable practical experience. It is not worth while to waste one’s time with either the single, or what I should call the semi-double varieties, the flowers of which are altogether too ephemeral in character; it is best to confine one’s efforts to the cultivation of only three or four fine balsams of certain colors, and deliberately weed out all plants which produce single flowers as soon as these appear; they are very apt to enter the best collections of seed, and as balsams are quick and sure growers, we need not regret the destruction of unworthy specimens.

Choice Seeds. White seems to be a most desirable color in this annual, but I must also draw attention to an extraordinary double and delicate salmon-pink variety which I have recently cultivated with great success. This is really an exceptionally fine balsam; the flowers are frequently two and a half inches across, and they look like perfect little pale pink roses, especially when in the half developed state. The name of the variety is Malmaison.

White. Plenty of white is greatly needed in the garden which we are aiming to make artistic in color effect; we certainly should employ the balsam to fill the requirement. White is needed more than we at first suppose; indeed, I believe it is the perfect peacemaker among a host of colors, which without its presence would be absolutely hostile to each other. It is a great mistake to plant balsams near together; they should be isolated in order to reach a perfect development. If we will give a single plant a fair show it will grow to an astonishingly symmetri-
cal and broad size; a circle two feet in diameter is not too much space for it to develop in; surrounded with light and air the plant soon becomes a beautiful sight of clustering blossoms, and when one wishes to decorate a room or a dinner table, I do not think of any other annual which will contribute such a wealth of luxuriant white flowers. It is possible to create some charmingly artistic arrangements with the short-stemmed balsams.

It may seem strange to pass the many varieties which are blotched and striped without alluding to their artistic value; but their importance in the garden is not so great as the two best colors in this beautiful annual which I have dwelt upon so particularly. There are many other charming balsams which are remarkable for their colors; viz.: white lilac tinted, purple white spotted, and scarlet * white spotted. Besides the beautiful pink Malmaison variety, there are two others which are lovely, named Bloodstone and Speckled Beauty. The cherry red which occurs in the balsam, is an especially pure color.

Here is a great force in golden yellow and orange. What a magnificent richness of color, extending all the way from a pale yellow-white to an intense orange, do we find in the unpretentious pot marigold!

* There is no scarlet color in any balsam; scarlet implies the presence of yellow, and there is no yellow in the cultivated balsam. The balsam called scarlet is really a pure dilute red; nearer deep cherry red than scarlet.
I find it difficult to determine upon the variety which seems artistically most valuable to the garden. My own personal preference lies with the Prince of Orange, whose color certainly is a most princely orange. But if I should choose a variety that offered a color which is quite unique, it would be the Proust, or the nameless one with yellow-white petals and golden center. The combination of color to be obtained from white asters and these delicate calendulas is simply charming.

The varieties which may be particularly recommended for extraordinary color are:

- Prince of Orange
- Intense orange
- Pure Gold. Brilliant lighter orange
- Meteor. Yellow-white edged with orange
- Le Proust. Nankeen color, or buffish yellow
- Sulphur. Strong yellow
- Trianon. Bright yellow with brown center

**Deep Yellow.** Perhaps the variety named Pure Gold is quite as strong and beautiful as the Prince of Orange. There is really no lemon or sulphur yellow in the calendula; the whole family, it seems to me, insists upon presenting yellow in its deepest tones,
even if diluted with white. I wish all those who object to the herb-like smell of this beautiful flower, would learn to like it as I do. It is possible, I think, to find something which will attract one in all these odd smelling things, such as yarrow, marigolds, petunias, tansy, tomato vines, and wild parsley.

**CANDYTUFT.** This is an annual confined to three or It is used mostly for and is displayed in certainly it is more sweet alyssum of treatment; strength to it and more interesting. fer myself though, dytuft displayed in a way that might give it a chance to as- assert its own individuality.

All the colors are good, but the white variety known as Rocket seems most useful and satisfactory. White is a very necessary element in the garden under any circumstances, and white candytuft is an excellent neighbor for all colored flowers. A little group of this variety is particularly pleasing below a cluster of rich red gladioli, or snuggled beside a clump of love-lies-bleeding. A large
mass of the white is all very well in its way, but I make a
practice of putting my candytuft all over my garden; anywhere, in fact, that a bit of
low-down white color is desirable. This annual grows easily in sandy soil with little
plant food and a liberal amount of moisture.

**CELOSIA.** This is an ornamental plant which can hardly be called a flowering one, as its compact masses of bloom either comb-shaped or spike-shaped are most interesting on account of their rather decorative form. So, whenever we plant the cockscomb it must be remembered that it will figure as a decorative feature of the garden and not as a beautiful character like the rose.

The plant is conventional and prim enough to furnish splendid effects in color for set shapes and borders. It is particularly adapted to the severe arrangements suited to a garden belonging to a Colonial type of house. The varieties which are most attractive are:

- Triumph of the Exposition, plumed or spiked.
- Japonica, pyramidal, combs ruffled.
- Fire-feathered, branching.
- Glasgow Prize, dwarf.
- Pyramidalis Aurea, feathery spikes.

Celosia should be planted early, and it needs plenty of plant food; otherwise it will amount to very little, and we will be greatly disappointed. But with proper care the plant becomes a delightfully beautiful and symmetrical object of which the garden may be justly proud.
CHAPTER XI.

COREOPSIS.

OREOPSIS is a splendid, golden-rayed flower which does not attempt to clothe itself in primary yellow. It does not even approach yellow as near as does the sunflower; to prove this, place a specimen of the Drummondii coreopsis beside a petal of the Globosus Fistulosus sunflower, and it will be seen that the latter has much less orange in its composition.

The coreopsis (it is sometimes called calliopsis) when red, is velvety and soft in its color as well as intense. Clothed either in gold or red, it is a cheerful, bright-faced little flower that blooms profusely all summer; its red-maroon color beside the gold is powerful to a fault, so it is well to keep it away from all solferino and magenta petunias, crimson asters, and phloxes of any color. But beside white flowers, or blue bachelor’s buttons it loses every trace of crudeness.

The Drummondii coreopsis is bright, golden-yellow in color, and it often measures fully two and a-half inches in diameter; its brown center is small and set around with little dark-red spots. I should grow this variety quite by itself, and keep the others in another part of the garden.

It is a pity to allow the tall, slender plants to sprawl
over the ground or their next neighbors; this they will certainly do, after the first rain-storm, unless they are neatly fastened to slender green stakes.

**COSMOS.** Of all things dainty and delicate in the garden, certainly Cosmos may claim to be one of the first, and in grace it equals the lily-of-the-valley which has only the additional advantage of perfume; certainly the latter flower is admitted a lasting favorite, and it seems as though it possessed a higher claim for daintiness; be that as it may, only those who are intimately acquainted with a broad patch of pink and white cosmos, growing to a height of six feet or more in the fall time of the year will appreciate the exquisite daintiness and airiness of this late-blooming flower. I can only say that if the lily-of-the-valley is to be considered the crowning grace of late spring, then cosmos is the crowning grace of early autumn! The flower has the general shape of Drummondii coreopsis, and
the white variety is in pleasing harmony with the golden color of the latter. I cannot grow cosmos myself, as the latitude and altitude of my garden will not permit. It is not difficult to grow, however, in a reasonably warm climate, as it originally came from Mexico. We should possess the flower in our gardens if it is in any way possible; the Pearl, a white, large flowering variety, is considered the best.

**DIANTHUS**

(Pink).

This is a charming flower (I refer to that of either the China or the Japan variety) which I consider an excellent substitute for the magnificent carnation pink, and one which, almost limitless in its variations, will please all who attempt its easy cultivation. The varieties I like best are:

- Chinese Double, mixed colors.
- Heddewigii, albus fl. pl.
- " atropurpureus fl. pl.
- " laciniatus fl. pl.
- " Mourning Cloak.

These are all double; the single varieties although prettier are not so effective. The white is exceedingly valuable when mixed with other colored flowers, and the dark red is quite a unique color in itself. The plants flourish well in sandy soil with a liberal amount of plant food.

**ESCHSCHOLTZIA** (California Poppy).

Of all rich yellows, orange yellows, and orange tones which may be found among the flowers, certainly these colors on the petals of the beautiful eschscholtzia are the
purest and best. A vase full of these golden flowers is a magnificent and unquestionable proof of the fact that nature's colors are far beyond the artist's pigments in both purity and brilliancy. The garden is incomplete without a good sized bed of this incomparably bright annual; it does not need a neighborhood of anything else but green. It is not necessary to specify any particular variety, because all are equally handsome, and all look well intermixed. The so-called white is a color extremely delicate, and I should describe it as yellowish cream. Eschscholtzia grows splendidly in sandy soil, must be planted where it is to remain, and needs little or no care, if below its roots there is a moderate supply of plant food, and over its head falls a little water in hot weather at eventide.

**Euphorbia.** This is a splendid plant for decorative effects, and it is easily grown, although it is very slow in coming to maturity. The bright coloring of the variety called Heterophylla is especially desirable for the neighborhood of any sober green foliage, plants or shrubbery. Also the variety named Variegata (Snow on the Mountain) will be found as lovely as it is useful in producing those effects of color and form which go a great way toward making the garden beautiful. Unless we exert ourselves to obtain such novel and beautiful elements for garden adornment we cannot avoid the commonplace; and it is the commonplace which is farthest removed from the artistic.
FOUR-O’CLOCK
(Marvel-of-Peru).

Some old-fashioned flowers do not seem to grow into popularity again, and I fear this one is an instance of such modern indifference. I can say nothing new about the pretty four-o’clock; everybody knows all that stands to its credit, but I have a suggestion to make regarding its use. Suppose that we employ it in the garden as we would a Shrub Effect, a pretty hedge, and in bare unused space it covers the ground well and quickly, besides furnishing quite a patch of color.

I should plant the four-o’clock in just such a position as that intended for the rhododendron; give it plenty of room, a little plant food, all the sunlight possible, and frequent sprinklings from the hose.

GAILLARDIA. The gaillardia, single or double, is beau-
tiful enough to merit a prominent position beside paths or in beds which lie directly beneath our eyes. I particularly like the variety named Lorenziana as it furnishes an excellent display of color, and the flowers are double; they remind me of some chrysanthemums. The single varieties are quite as pretty as the Lorenziana, but so different in appearance that they may be considered as separate things. The colors are toned and rich. The gaillardia flourishes in sandy soil.

**LINUM.**

I can especially recommend the crimson variety. It is really a beautiful annual, not half as well known as it should be. The foliage is delicate and graceful, and the flowers are perfectly crimson in color, satiny in sheen, of a shape and size similar to the grandiflora phlox, and pleasing enough to attract immediate attention. I should never place the linum anywhere near orange or yellow flowers like coreopsis, nasturtiums, calendulas, or marigolds. Neighbors clothed in magenta, purple, violet, and purple-blue, are kindred spirits.

**LUPIN.**

This is a symmetrical plant, admirably
adapted to a position where its pretty leafage and bean-blossom shaped flowerets will show off against a dark background. The plant grows to a spreading size and its flowers are daintily tinged with pale lake, magenta, solferino, and blue-purple. The white is less interesting to me; I prefer the Lupin in mixed variety, as its variations in color tone are all harmonious. It flourishes in sandy soil, and deserves a prominent place in the beautiful garden.

**MARIGOLD** (Tagetes).

This is an old garden favorite with which I think we should renew our acquaintance. Experience prompts me to say that the plants should be started very early to insure a good crop of flowers before the September frosts threaten the garden beds. Under favorable conditions no annual except the nasturtium will yield the immense quantity of flowers that this stocky little plant will! I refer particularly to the Dwarf French variety.

The African marigold is tall and large flowered, but it is not
the prolific bloomer that the French Dwarf is; among my own specimens of the latter variety is one of a perfectly symmetrical shape, spreading with luxuriant foliage over a space twenty inches in diameter, and bearing seventy-five blossoms in various stages of development, which, when full, will measure an inch and a half across!

There is nothing extraordinary in this for the dwarf marigold. But I cannot help making the comparison between marigolds as I know them, and the miserably slim, scrawny specimens which in early June I see for sale on the street corners, with perhaps two or three blossoms by which one may identify the plant. We must not judge of marigolds by any such puny characters as these. Seed which I plant on the tenth of May, if the weather is very warm, germinates in a couple of days or so; the plants grow in rich dark foliage all through June and July, and in the early part of August only three or four blossoms appear on each plant; but by the last week in August the plants are blossoming with prodigal liberality, and through the first and second weeks of September it is hardly possible to collect all the flowers unless one makes a business of it! It is a very common thing for me to pick a thousand blooms in one day, and this from plants which grew from ten cents worth of seed! It must be borne in mind that my garden is in a cool mountain climate, where Jack Frost
frequently takes possession of things as early some years as the fourth of September; this is not conducive to the proper development of any flower, much less the tardy blooming marigold. It is my custom to start the marigolds in doors, and transplant them when danger of frost is past.

In particular varieties the individual flowers which I prize most for their color quality are:

Tall. El Dorado, those which are golden yellow, and light yellow.
Lemon Queen, lemon yellow.

Dwarf Grandma, those golden yellow, and bronze red.
French Compact Gold Striped.
French Double Dwarf Mixed, lighter yellow.
Legion of Honor, single, very dwarf, yellow with brown center.

A Tiny Marigold. The last mentioned variety is remarkably small, growing only seven inches high; but it has a charmingly conventional little flower which blooms early and continues until late. The El Dorado variety has immense flowers fully three and sometimes nearly four inches in diameter; the golden

"EL DORADO."

"LEGION OF HONOR."
yellow ones are beyond description brilliant and rich. If this giant variety of the marigold has time and warm weather enough to do its best in, it will bear scores of large, hand some flowers far more beautiful than any of the dwarf variety. The plants do well in sandy soil.

**MIGNONETTE.** A sweet little annual this is, which we all love; yet it does not amount to much as a color factor; still, there is that delicate yellow-green effect of its foliage, and a rusty tip to its flowers, which are exceedingly valuable beside solferino and magenta. I find the most satisfactory variety in my own garden is Machet. It needs sandy soil, some rich manure below, where the roots will penetrate, an occasional drenching with the hose, and unremitting snips with the scissors; otherwise we will have little mignonette for our rooms.
CHAPTER XII.

NASTURTIUM (Tropæolum).

What a glory of color there is in a large bed of nasturtiums! It is the despair of the color-loving artist, whose palette never can hold such brilliant hues of gold, scarlet and intense red. The keynote of the Nasturtium's color is yellow, and in every member of the family, that color is present either with some modification or influence. In the Lady Bird the modification shows itself in a golden-yellow, and in the Edward Otto the influence is apparent in a purplish tone of such compromising uncertainty that we do not exactly know how to name the color; but a little experiment with some water-colors will show us where the peculiarity lies—by mixing a purple with white and then adding a trifling amount of yellow we may obtain exactly the color of the Edward Otto.

It is very confusing to read the descriptions in catalogues, of the colors which characterize different types; there are really very few colors involved, yet the seedsmen multiply these by using so many adjectives that we can obtain no definite idea of the hue of a particular type until we actually hold the flower in our hand. I shall therefore describe the

Accurate Color Terms.
appearance of certain varieties, and use only those color-terms which I consider scientifically accurate. The word ruby-red means specifically nothing, so long as we can employ a direct color-term like scarlet-lake, or carmine, or cherry-red. The Pigeon's-blood and the Spinel rubies have each a distinct color of their own; which of these colors do we mean when we say ruby-red?

The following types of nasturtiums are perfectly distinct, and it is impossible to confuse them with one another:—

* Empress of India, . . . . Intense velvety red, dark foliage.
* King of Tom Thumbs, . . Intense scarlet.
  Flammulum Grandiflorum, Orange scarlet.
  (common), . . . . Striped gold and orange, five scarlet spots.
  Lady Bird, . . . . Golden yellow, five scarlet spots.
* Fire-fly, . . . . Golden yellow scarlet streaked, five scarlet spots, dark foliage.
* Peach Blow, . . . . Peach-cheek flushed, five deep red spots.
  Golden King, . . . . Golden yellow.
  Chameleon, . . . . Reddish, bronze, and golden streaked.
  Ruby King, . . . . Deep pure red tinged with maroon.
  Crystal Palace Gem, . . Straw yellow, five red-maroon spots.
  Aurora, . . . . Salmon, suffused orange-buff and buffish-orange.
* Prince Henry, . . . . Straw yellow, deep scarlet-pink streaks, and whitish-scarlet spots
  Ruby Eyes, . . . . Pale straw yellow, five red-scarlet spots, sepals a dull very whitish red, dark foliage.
* Pearl, . . . . Pale straw yellow.
  Heinemanni, . . . . Chocolate brown.
* Bronze, . . . . Old gold, or deep ochre.
  (common), . . . . Yellowish brownish orange, five maroon spots.

* The varieties marked with an asterisk I consider especially beautiful.
This list comprises about all the varieties of color in the
dwarf, Lobbianum and major varieties of the nasturtium family. I do not recognize crimson in any variety; what is
called such in the seedsmen's catalogues is

True Red.

really a deep red. Pure red is a color
between scarlet and crimson, and when it is intensified it is
not very far from the hue of the second nasturtium on my
list; but there is still a presence of yellow in this variety
which prevents me from calling it pure red in color.

There are some beautiful combinations of color possible
with the nasturtium family, and one has only to

exercise a little good judg-

Color Combinations.

ment to find them. There

is Pearl and Edward Otto;

Prince Henry and Rose; Lady Bird or

Golden King and Pearl; in this last instance

the Pearl is better than Crystal Palace Gem,
because the maroon spots on the latter are too
strong to stand beside the delicate scarlet spots

on the Lady Bird. Then there is King The-

odore and Empress of India—also the King

of Tom Thumbs if one fancies maroon and

brilliant scarlet together. The Crystal Palace Gem and

Bronze are good companions, as are also Aurora and Pearl,

Golden King and Fire-fly, and Heinemanni and Aurora.
The Rose, King Theodore, and Empress, are exceptionally
beautiful when quite alone.

New Nasturtiums.

The variety which (for the sake of indi-

vidualizing it) I have named Peach-

blow, is charmingly like the velvety

flushed cheek of a peach, and it is best seen alone; any
yellow beside it is ruinous to its daintiness. The palest
possible maroon pink (or shall I call it crushed raspberry
color?) is suffused over the whole petal, and the five spots
are reddish maroon. I have also taken the liberty to individualize two other varieties by the names, Ruby Eyes and Fire-fly; both are extremely beautiful and for the past two years I have succeeded in preserving the types. These two charming nasturtiums should be kept alone by themselves; the Crystal Palace Gem is so nearly like the one and the Lady other that they separate, otherwise flaming cheeks of. I fancy some cactus blow;

Prince Henry.

at once striking and we must consider the variety called in alogues Ceruleum Ros must be like my Peach—but not having any acquaintance with it I cannot be sure; at any rate, I consider it from an artistic standpoint incomparably superior to the new Prince Henry, although not so delicate in color as the latter. For vividness of hue nothing can excel the King of Tom Thumbs': his fiery scarlet combined with deep blue-green foliage is a color combination beautiful. But by all means the surroundings for this variety, and choose for it a neighborhood of white flowers or else isolation on the border of a spreading green lawn.

Dwarf Varieties. I grow the dwarf varieties mostly in tubs, and here and there I allow one of the Lobbianums to trail down over the edges. When
the dwarfs are planted in beds, I find that not more than two varieties together produce the best results in color effect, and often I prefer to see the Pearl, Empress, King Theodore, Rose, and Golden King quite alone; in the tubs they should always be alone. I should take care not to put any of the light yellow nasturtiums near marigolds; the tones of yellow in the latter are purer and likely, therefore, to injure such delicate characters as Pearl, Crystal Palace Gem, and Aurora.

Sulphur yellow is a very light pure yellow nearly approached by the lemon yellow African marigold. There is not a trace of the color of sulphur in any variety of the nasturtium; and the nearest approach to it as instanced by the Pearl and Crystal Palace Gem is miles away! Straw yellow and sulphur yellow are conflicting companions; separate them, and there is a greater likelihood that our color combinations in the garden will approach near perfection.

A Pretty Corner in the Fence.
Other varieties of the nasturtium such as Coccineum, Roi des Noir, Spotted King and Beauty, I do not consider especially different from the types mentioned in my list so far as color-tone is concerned, and we may pass them therefore as properly considered.

My own preference, so far as the three kinds of nasturtiums are concerned—dwarf, Lobbianum and major, is for the dwarfs. Through August I can gather fully three hundred blossoms a day from a not very extensive garden patch! One could not do this with the two larger varieties, unless they had double the number of plants; still the Lobbianums give me some splendid great flowers, far ahead of the dwarfs in both symmetry and robustness: besides, the climbers are charmingly beautiful when trained over a rustic fence in the fashion that my sketch suggests.

Nasturtiums planted on the 15th of May will begin to bloom freely two months later. I have planted seed (soaked) on the 20th of May and have gathered the first flowers on the 8th of July; this was under no favorable circumstances, as the weather was exceedingly dry. When the plants begin to bloom I remove every full-blown flower both in the early morning and the evening hours, and by this means keep the plants in continuous bloom for over four weeks' time. In each of my barrel-tubs I leave (after the transplanting process) six plants; from a dozen of these tubs, one may gather three hundred flowers (on the average) every day for twenty days in succession!

The plants do not want anything but sandy soil, sunny exposure, plenty of water, and a pair of scissors kept constantly busy lopping off flowers and superfluous leaves.
NASTURTIUM.

Under these conditions I estimate that a bed 6' x 20' will yield a thousand blossoms a day when the plants are at their height of flowering. In order to have some flowers later in the season I plant a few seeds as late as the 15th of June, and thus lengthen the season of bloom. In conclusion, it is safe to say of the nasturtium, that no other annual will produce such a lavish profusion of flowers for so long a season with the same small outlay of time and labor!

I need say nothing about the variety of color this charming annual possesses; it is only sufficient to testify to the fact that although there are only six distinct types of color to be found in the whole family, there are no less than fifty variations of these six types, each one of which represents a perfectly typical flower, unlike any of its fellows!
NICOTIANA. This is a beautiful annual and one which is rapidly growing in favor with everybody. The garden cannot well dispense with its company, no matter how limited the space may be.

The variety named Affinis for flowers, and that named Colossea for plant form are decidedly the best in the tobacco family. I have tried the Atropurpurea variety and I find it too insignificant to merit much attention. Not so with the Affinis; this is perfectly beautiful in every respect, delightful in the house as a cut flower, and marvelously striking in the garden. Somebody, I remember, says Affinis is best adapted to a back seat in the well appointed flower garden! But I do not agree with this at all. There is nothing common or coarse about this sweet-scented annual; it is a broad, effective character, graceful, and bold in angular lines (something unusual in nature or art), tall, where we are surfeited with dwarf plants, and daintily tinted with green white, where we are in most need of white and delicate tints. Therefore, I like to see it in the immediate foreground. It grows easily and quickly in sandy soil with a small amount of plant food. The Colossea variety is a splendid plant for the background where broad effects are necessary.
CHAPTER XIII.

PANSY.

THOUGH this popular flower is not an annual, it is a ready bloomer the first season from seed sown early in the spring. Besides, in order to have what might be called fully developed and perfect flowers, seed should be sown each year. It must be remembered that in order to have fine large blooms the plants must not be allowed to grow scraggly and long; they should be compact, and have luxuriant dark green leaves. All sprouts which reach out beyond a certain limited space should be pinched back; herein lies the secret of handsome, great flowers.

My own special preference is confined to the French varieties, although the German ones will be found very satisfactory. The best pansies, I think, are found in the following strains:

- Bugnot's selected.
- Cassier's Odier, giant.
- Improved Trimardeau, giant.
- Imperial German.

A beautiful bed of pansies, whether confined to two or three colors or mixed without reference to a particular harmony, is a very necessary adjunct to an artistic garden. There is no need of mixing them with other flowers; the
mistake that many gardeners make, is in planting these sweet-faced little things all around and under larger plants which, to my mind, more or less interfere with the interest one has in the pansy itself. There is no harm in a group of neighboring yellow daffodils, nor is there any in the proximity of a mass of bright colored tulips; but it is an unnecessary conventionality to see squares and circles made up of these three flowers exactly spaced, and bereft of all likeness to the freedom of nature. When pansies are treated in this way one is apt to forget the individuality of the flower, and remember the pains the gardener went to in order to make his geometrical figures appear perfect! Pansies need rather rich earth to grow well in.

PETUNIA. Here we have an annual which revels in magenta, solferino, crimson pink,
and purple. There are few other flowers which dare to dress themselves in colors which are so compromised by public opinion; indeed, beyond cinerarias, foxgloves, orchids, and rhododendrons, there are none of our common garden flowers which show any preference for colors of the magenta order.

Separation of Different Reds. It is a pity that these purple-reds are not properly appreciated; but I do not see how appreciation is possible where there is a lack of understanding about color harmony.

So long as we persist in placing plants which will possibly produce scarlet or orange flowers beside petunias, just so long will magenta prove itself repugnant to what we may choose to call "a delicate sense of color." If we find that we must surely have both scarlet and magenta in the garden at no great distance from each other, we should certainly arrange the beds so shrubbery, hedge, terrace or
arbor will intervene. At any event, it is always possible to separate such conflicting colors by a generous patch or belt of white flowers, and white petunias are most efficient helpers in this direction; indeed, I consider them the greatest factor in white that the garden can boast of!

The varieties which produce the greatest color effects are:

- Pure white.
- Nana compacta
- Kermesina Splen
- Rosea, crimson pink, nearly solferino dens, magenta.
- White, five magenta stripes.
- Red Star, magenta, five white stripes.
- Pink Mound, soft crimson pink, white throat.

Then there is the Grandiflora variety which far exceeds in size if not in color mass the varieties mentioned above. The best of these are:

- Defiance, Large-flowering, variegated.
- Venosa, veined, particularly the purple and pale lilac.
- Fimbriata, variegated, and exquisitely ruffled.

I so much prefer these graceful large single varieties to the double ones, that I have nothing to say about the latter except that they retain all the magnificent color which is found in the single sorts.

**Analogous Harmony.**

There is no more beautiful instance of the harmony of analogous colors, than that which may be found in the large, single magenta petunia, the face of which is an in-
tensely purple red, and the reverse side a steely purple blue. I need only say that few artists are successful in the combination of these two colors, and few presume to make any attempt at it; but there is one who is more than successful;—Mr. Burne-Jones. His pictures hold one entranced before coloring so bold in its uncommonness that the effect on the mind is something like that of a moral shock; we do not know whether to admire or to be indignant! But the shock once over, we are likely to become converts to a new way of thinking about color.

When that new way of thinking arrives we will cast away all prejudice, and believe that scarlet is not the only beautiful red. This possibly may result in discarding scarlet geraniums as neighbors for petunias, and in selecting purple, blue, and white bachelor's buttons to take their places.

Room for Petunias.

The petunia is a rank grower, and it should have plenty of room to develop in; I find that sandy soil is quite to its taste, and common phosphate placed just below the roots will prove excellent food for the growing plants to thrive on. A teaspoonful of phosphate is quite enough for one plant.

PHLOX DRUMMONDII.

There are some annuals which certainly possess a most marvelously varied character, and this one is among the number. The calendula and coreopsis adhere very closely to simple form, and refuse to depart from golden-yellow except to a qualifying degree. But poppies and this annual phlox seem to delight in surprises both in form and color. Star phlox is a garden marvel, and yellow phlox must be regarded as a curiosity!

Phlox Drummondii is such a variegated character that,
unless we have been long acquainted with it, we may reasonably expect to be surprised with some new color combination each year we put the seed in the ground.

The pretty pink variety sometimes called Salmon Rose, is charmingly delicate and refined, and resembles in color the Blanche Ferry sweet pea; but the latter is not nearly so color-pure as the phlox. Besides this pink variety there are others with beautiful tones of crimson, crimson pink, scarlet lake,

...deep pink,
...pure pink,
...solferino, and very pale salmon pink. I may say there is pure red to be found in this extraordinarily variegated flower, but I must point to the fact that it never presents scarlet to us. If we want to know what scarlet is we must look at the Madame Crozy canna, or the King of Tom Thumb nasturtium.

The so-called Yellow phlox is only yellow in a general sense of the word; the true color of it is pale cream-yellow, a tone very much lighter than that of the Pearl nasturtium. It is a perfectly lovely tint, and valuable among the other colors in the garden.
The greatest care should be taken to separate conflicting tints in this annual. I have before me a delicate pale purple star variety, and it is perfectly evident that nothing but white and yellow would look well with it. The salmon pink must be kept away from every other pink tint, pure or crimsonish. The blood red or scarlet lake color must be separated from deep lake pink, crimson, and magenta; and solferino colors (which look pretty beside the lake pink) should be removed from the vicinity of salmon pink tints. One can hardly be too careful about the color effects among the phloxes either in the garden, or indoors. I must make a very strong appeal again, as I have already done in the chapter on Color Harmony, in favor of magenta and solferino. These two colors are very pronounced among the phloxes, and unless they are carefully removed from all proximity with any other colors excepting white, pale yellow, crimson, and purple, the influence exerted upon them will surely be disastrous. But place the beautiful, toothed, purple phlox beside the Pearl nasturtium, and the solferino phlox beside the white aster, and we must see at once that the color harmonies thus produced are extremely dainty and beautiful. I have a magenta phlox before me whose color is identical with that of a petunia beside it, and as this petunia's rich purple-red color is familiar to everyone, it will be understood at once what the magenta phlox looks like.

The varieties which are most valuable for their color strength are:

Salmon Rose; a six-pointed white star in center.
Alba; cream white.
Stellata Splendens; pure red, white star in center.
Red Striped White; streaked.
Coccinea; called scarlet, really a pure red.
Blood Red; deep red.
These all belong to a strain which is called Grandiflora. The white is large and very beautiful; the color is creamy and rather translucent in quality. Here again is a valuable white flower for the garden, whose delicacy and grace are its best qualities.

**Star Phlox.**

The Star and Fimbriata phloxes do not contribute as much color strength to the garden as the Grandiflora variety does, but they make up for this deficiency by a most astonishingly beautiful mixture of color tones arranged in tiny figures with five points, which remind one of snow-flake crystals dyed in every imaginable tint of pink, red, and purple!

The annual phlox, I find, thrives well in sandy soil which has had plenty of enriching from the cow-yard, and when I plant it in tubs it seems to grow luxuriantly; this is undoubtedly on account of the tubs holding moisture better than the garden beds. Nothing is prettier than a lot of star phlox, which hangs in graceful disorder over the edges of a green tub.
Differences in Poppies.

Poppies are rank growers and early bloomers. They are so extremely delicate when young that it is better not to attempt any transplanting; the seed should be sown where the plants are to remain.

A garden of poppies is almost complete in itself. So great is the variety of form and color among the flowers, that it is difficult to believe that they all belong to one family.

There are two types of the poppy, each of which has a distinct character of foliage; one is a plant of scraggly growth with hairy stems, and rather narrow grass-green leaves, and the other is a tall conventional looking plant with sharp-pointed, or toothed leaves of a very light, cabbage-green color arranged around a smooth stem. From the artistic point of view these two divisions are all-sufficient; they furnish contrasts in color and form at once valuable in the arrangement of the garden. The actual divisions of the poppy family are three; Ranunculus, Paeony, and Carnation flowered.
The following list includes, what to my mind, are the most beautiful types:

Shirley (single). Flag of Truce (single). White.
Iceland (double and single). Umbrosum (single).
Golden Gate (single and double). Fairy Blush (double). White, deep pink tips.
Every conceivable color known in Poppies.
Mikado (double). White and deep pink mixed.
Empress of China (single). White, red-edged.

Now the beautiful Empress of China is no more like the airy Mikado than coreopsis is like the calendula; one resembles a dainty, shell-like porcelain cup, and the other, a globe of deep pink-tinged down. As for the Japanese Pompon, it looks like a ball of dainty-colored China silk. Again, if we will notice in the Ranunculus variety, a white flower with a strong pink tinge at the base of the petals, another with a spreading of maroon and dull, pale crimson over the greater part of its white petal, and yet another, all salmon-pink, we will have before our eyes the prototypes of three pretty girls, robed, one in a fluffy white lawn dress, trimmed with a pink ribbon or two, and with plenty of ruffles; the next in a light airy gingham, white ruffled; and the last in a soft, pink crêpe de chine!
POPPY.

A White Type. Our ideas of poppies are generally pretty closely associated with the scarlet types; but I think one of the most beautiful of all the varieties is the fairy-like white flower, semi-double, which we may find in the Ranunculus division. Its petals appear as though spun from the thinnest and finest white silk; nothing can possibly be daintier, nothing lovelier, nor purer. Ah! it is indeed a difficult thing to choose the most beautiful of all beautiful objects. In the flower garden, justice is well-nigh impossible. Which is the beauty of all beauties, is it a rose, a lily, a chrysanthemum, a poppy, or a pæony? We must remember that the individual flower must be considered, not the family to which it belongs. I will say, therefore, that this charming white poppy of which I speak, is far more lovely than many a white rose. It is my delight to grow a large bed of the daintiest white and delicate tinted poppies, from which every red-dressed character has been removed.

Those individual poppies which seem to me perfectly beautiful (I mean just what I say—beauty without an imperfection) are these:

*Ranunculus-flowered.*—Salmon pink, white-edged; pure pink, white-edged; deep maroon pink, streaky, with a central cluster of sage-green stamens; maroonish red and white (reminding one of gingham); pure pink; pure white; intense red.

*Japanese Pompon.*—Deep salmon pink; pure scarlet; pure white.
Shirley.—Pure pink; pink, white-edged; white, pink-edged.

*Carnation-flowered.*—Lilac, greatly toned down; pinkish cherry; white.

But there is, besides, a score of magnificent flowers which are identified in the florist’s catalogue by significant names; for instance, Bride, Flag of Truce, Snowdrift, Eider-Down, and White Pæony. These are all purely white; the first two are single, and the others double. It is an intense relief to see these double white beauties, which appear at a time when we are loaded down with golden flowers, such as yellow coreopsis, orange and yellow nasturtiums, yellow calendulas, orange and gold zinnias, and yellow cannas, but there is little or nothing that is large and white until the first double White Pæony, or Eider-Down poppy appears; then an involuntary exclamation of pleasure passes our lips at first sight of it.
The two single beauties probably will not prove favorites with everybody as they are with me, but if I wished to paint a gloriously choose one of these pies. Possibly, we there is nothing plicity, but I

Single Poppies. single white pop may think that very glorious in sim believe there is, par- particularly in moral character and in flow- ers; we are heedless of both amid the complexities of life, and do not sit long enough by the quiet wayside to give them proper consideration. If Robert Burns had not stayed his hand at the plough to pick up his "wee crimson-tipped flower," we would never have fully realized the beautiful sim-plicity of the common English daisy.

Fine Varieties. But I have not com- pleted my list of the score of magnificent poppies. Be- sides the varieties already named are Chamois Rose, Silver Gray, White Pæony, White Striped Scarlet, Dane-borg, the yellow Nudicaule, and the white Snowdrift. These are among the Pæony-flowered, Iceland, and Carnation-flowered varieties. The scarlet Umbrosum poppy, with a black cross in the center, is very dainty, but it is not distinctly different from other scarlet poppies; its color is satín-like and wonderfully brilliant. I should always grow
a lot of single scarlet poppies separate from those of any other color, except it be white; all the dainty light colored ones will be injured by the proximity of red.

The so-called Tulip poppy is rather a novelty than a beauty. The cup-shaped flower is certainly like a tulip, but there is little advantage in the resemblance of one flower to another; the real attraction in the tulip poppy is in its gracefulness and color-strength; certainly the latter is remarkable, and a large group of the intense red flowers is a beautiful accession to the garden.

After all, the real beauty of a garden is quite dependent upon the individual beauty of its flowers. I do not care how charming the arrangement of the garden itself may be, when my eyes must rest on commonplace and poor varieties of flowers. One may pass a host of common, single, scarlet poppies, but they must pause before a single specimen of the variety called “Fairy Blush.” I have before my eyes, as I write, four transcendently beautiful poppies of this name; and I wonder in the immediate presence of such loveliness, what a garden would be without the possession of it! Well, that is a question. Beauty when it exists in a rose, is finite; we
may grant that it is perfect, but perfection does not include infinity, and the loveliness of the rose is not the loveliness of the Fairy Blush poppy. So, I think we must conclude, that the garden without this poppy lacks at least one essential type of beauty. It needs no enthusiastic description to make one admire it, the sight is enough. I need only say that a flower four inches in diameter, whose basic color is creamy white, on which the most perfectly pure, strong pink is distributed in every possible degree of delicacy, is a thing of beauty which needs no recommendation. I cannot say quite so much for the Mikado; it is altogether dainty, but different from the Fairy Blush, inasmuch as it lacks the compact figure of the latter; its petals are beautifully fringed and twisted, its color tone is identical with the Fairy Blush, and there is something in its character which reminds one of an old-fashioned bon-bon motto-paper! But this poppy is none the less beautiful, and if a comparison of flowers is justifiable, it would not be amiss to mention the Mikado poppy with the Lilian B. Bird chrysanthemum.

The New Cardinal. The New Cardinal poppy is gloriously pure and sweet in color; it is precisely cherry-scarlet in color tone, and reminds one forcibly of the cardinal garments which the French artist, Vibert, delights to paint. My acquaintance with this poppy is slight; but the remembrance of its beauty is so strong that in future there shall be a corner of my garden which will revel in its charming color. No other flower can rival it in purity; and beside a group of white poppies, one can conceive of nothing quite so refined when its brilliancy and strength are taken into consideration. It is usually the case, that as color increases in brightness it loses in refinement and delicacy; but this does not seem to be true of the New Cardinal poppy.
PORTULACA. I use this charming little annual to fill up broken and irregular spaces. Indeed, it will be found a gem for covering bare ground! It has the happy faculty of growing under almost any conditions, and it furnishes color enough to please the most exacting flower lover. In spite of the fact that uncongenial crimson, scarlet, pink, and red are found among its blossoms, these colors seem to intermix with no discordant effect. I should plant the mixed seed, and afterward eradicate all colors which might prove inharmonious with the surroundings.

This is a PORTULACA RICINUS (Castor Oil Bean). This is a magnificent tropical-appearing plant well worth our attention. I like all varieties without exception. The red Cambogensis may take the fancy of most people, but I like the Cœrulescens quite as well. We will not err if we try all the varieties, and choose those which are our personal preference for a second season’s growing. Borbonensis Arborea is immensely tall and befits a large garden with plenty of space; Sanguineus is blood-red, and is handsomely relieved by light green or white; Gibsonii is bronze-colored, and is interesting in the immediate foreground.

The plants all grow rapidly, and like a common sandy soil. I find that they need lots of plant food where the roots will spread, and a heaping pailful of manure is not too much for them to feed upon during the summer months.
CHAPTER XV.

SALPIGLOSSIS.

This annual is not as commonly known as it should be. Of all aesthetic colored flowers it is the most perfect; evidently the florists find some difficulty in describing its colors in their catalogues, as I notice that in the six books before me, salpiglossis has not a specific color term for a single variety! This is not without reason, for it is well-nigh impossible to determine what color the odd annual is partial to!

The general effect of the colors in two of the varieties is terracotta; perhaps one of these inclines toward what is familiarly known as crushed raspberry. The veining of color is like that in both petunia and nasturtium; in fact, the flower resembles the petunia in type, and the nasturtium in mixed color markings. But the individuality of salpiglossis is as marked as that of scabiosa, and it is idle to compare it with
any other flower. The beauty of our garden must depend in a great measure upon such eccentric characters as these.

What is the necessity of filling the beds with commonplace scarlet geraniums, sage-green dusty millers, and brown-red coleus? One grows tired of the repeated and persistent presentation of these three prosaic characters. We cannot know anything about the beautiful salpiglossis until we shut our eyes to our neighbors' gardens, take no advice and accept no arrangements of gardeners and florists, then shift for ourselves on new paths of discovery with the horticulturist's catalogue in hand!

Salpiglossis is not a prolific bloomer, but it is a dainty, shy, retiring spirit, deserving a quiet corner and a few white-robed neighbors. It will not contribute much to color effect, but it will make up for this shortcoming by an aesthetic influence much to be desired in the garden where contrast and variety must constitute a great proportion of what we call beauty. The flower cup itself is very pretty; the throat is delicately tinged with golden yellow, and the five divisions of the velvety-looking corolla are marked with dull, pale maroon lines which spread over a subdued and whitish-red.

This charming annual possesses a distinct individuality; one which may not easily be confused with that of any other flower. Perhaps in general appearance it resembles a double bachelor's button; but the likeness is too slight to deserve any notice. On the whole, it may be considered quite an original character, and as such it invites our close attention.

If there were nothing else about it but colors which differed from those of other flowers, the colors alone would
be worth an artist's attention, because its black is pronounced, its yellow is extremely dainty, its purple-maroon is strikingly intense, and its white and red are delicately toned and soft.

The varieties which I particularly fancy are sold under the names:

Black,
Royal Purple,
Snowball,
Beaten Gold.

Black Color. Perhaps the Black is the most beautiful because it is so unique. As a matter of course, the color is not black but dark, rich maroon, so intense in depth that the general appearance from a distance is actually black. The flower, in fact, is well named. A vase of black and white scabiosa is a remarkably beautiful sight, and, indeed, these same two colors growing together in the garden will attract the attention of the most unobservant. A close view of the black variety, with its rich dark color sprinkled over with dainty little lavender-white stamens, reminds one of a handsome circular bit of passementerie beadwork. The yellow variety
is distinguished by its paleness and consequent delicacy, and the white is valuable as a perfect and symmetrical little flower, toned in color, and furnishing a fine foil for all dark-colored neighbors.

Scabiosa blooms rather late, but persistently, and when cut it keeps fresh in a vase for ten days or more; it has a splendid long stem, and nods in the garden to every passing breeze in a truly graceful, pretty way. We should make up our minds that the garden is incomplete without this original little flower, and not put it aside for any other annual, no matter how additionally attractive the latter may seem. It is the old-fashioned favorite of old time gardens known as Mourning Bride, but times have changed and the flower has changed with them; to-day the supercultivated scabiosa is scarcely recognizable as Mourning Bride, so greatly has it been improved. Some of the larger specimens will measure over two and a half inches across. The plants thrive well in sandy soil not too abundantly enriched; they grow to a height of thirty inches sometimes, and require very little lateral space.

**Old-fashioned Type Improved.** This is a favorite flower in English gardens. Certainly it deserves to be a favorite in American gardens as well, although I am convinced that the particularly moist and equable climate of the old country is decidedly its natural requirement. Still, we can raise some beautiful and luxurious appearing stocks in our own climate, and it is worth while to take every possible means to make them grow well. My own success with this flower is rather indifferent, but the northern situation of my garden, and the extremes of heat and cold, which are the peculiarities of a New England climate, all seem to work against the sensitive
stocks, and I do not obtain one-half of the sweet scented blooms, that through patient care of the delicate plants, I think I deserve. Others, under more propitious circumstances, may find themselves more than successful with this beautiful, aesthetic, and sweet flower; it amply repays one for all the labor and care bestowed upon it.

The most beautiful colors are to be found in the following varieties:—

- Boston Florists’ White,
- Cut and Come Again,
- Bright Rose,
- Canary Yellow,
- Blood Red,
- Coppery Brown,
- Chamois.

It must be borne in mind that these colors are decidedly aesthetic in quality, and that not one of them is bright or strong in tone. Indeed, the very beauty of stocks consists in their sobriety of color; the green is soft and olive in tone, and the red and purple are subdued to the last degree. In consequence, it is scarcely necessary for me to warn all who wish to see this flower at its best in the
garden not to place it near any gaudily attired characters. A scarlet gladiolus, an orange calendula, or a yellow nasturtium beside our æsthetic stocks will effectually spoil them. For the culture of this delicate, but beautiful flower, see what Mr. Fewkes has to say in his cultural notes.

SUNFLOWER (Helianthus).

Mr. John Thorpe, the horticulturist who is our greatest authority on chrysanthemums and who first brought them to our notice, once said to me, referring to the sunflower,
“it ought to be known and painted more; there are so many varieties and these are so different that I am sure people would be astonished and pleased to become acquainted with the remarkable beauty of the whole family; it would be a revelation.” Since Mr. Thorpe made this statement, a closer observation and study of this queenly flower has convinced me that it suffers from unjust neglect. I need not say that to the artist the golden sunflower is a thing of more than ordinary beauty; there is no object in the floral world which appeals more strongly to his decorative instinct. Yet, notwithstanding this fact, the sunflower is looked upon with some disdain, is counted as unworthy of association with the more aristocratic members of Flora’s family, and is banished to a remote corner of the garden behind the vegetable patch.

We do not do justice to this magnificent annual. It deserves not only attention, but prominence in the garden which claims to be artistic. One of the English poets sings about—

“The sweet doorway greeting of the rose and honeysuckle;”

but I fancy that the cheerful, smiling faces of a group of golden sunflowers beside a rustic gateway, would be quite as welcome a greeting! Perfume we may not expect from such a character, but a strong and effective beauty is its peculiar possession.

The varieties which I would particularly recommend are:

The Miniature, small, single,
Oscar Wilde, tall, small, single,
Primrose, single, light color,
Argyrophyllus, silver-leaved,
Globosus Fistulosus, large double,
The Dahlia, large double.

The miniature variety is very pretty, and has a low,
bushy character, with small, golden-yellow flowers, brown centered, and with small, pointed, shiny, green leaves, somewhat like the foliage of the white birch. "The Dahlia," is a splendid, great flower, like a ball of gold; it is extremely rich and handsome when properly cultivated, and why it does not appear more often in the foreground, I am sure I cannot tell. A bush of yellow dahlias is frequently directly beside us in some prominent part of the garden, and its yield of gold is not nearly as great as that of the sunflower which is named for it; yet dahlias usually come to the front and sunflowers are left in the rear! The other four varieties I mention are so beautiful that they deserve particular attention; but we must pass them with a suggestion only regarding their treatment. Give the sunflower plenty of room and water. It is especially decorative, and deserves a prominent position to the front of the garden, and near some point where its tall form may be seen against a dark background.

**ZINNIA.**

This is a flower which possesses a most remarkable variety of brilliant and also aesthetic colors, but attempts no pronounced variety in form. It is a pity that a certain rigidity of stem and foliage bring upon it an imputation of stiffness; this is certainly a fault in the plant, but one which is easily overlooked. The most astonishing thing about the zinnia is its success in sustaining a palette (thus we artists designate a range of color peculiar to a particular painter),
of such comprehensive proportions, that I cannot think of any colors it does not possess except purple and blue! And what is again remarkable in its colors is their purity! The zinnia's scarlet, red, crimson, magenta, solferino, and pink, are absolutely pure. When the flower chooses to be brilliant it can give us besides, good light and golden yellows, white, orange, orange scarlet, and a salmon tint. Then there are lilac, flesh color, whitish orange, whitish scarlet, pale magenta and reddish maroon, all of which may be seen in varying strengths, constituting the so-called aesthetic colors.

Those varieties of the zinnia which may be considered as indispensable to the beautiful garden are:

Giant Mammoth, mixed, particularly the deep rich red,
Jacqueminot in color,
Double Lilliput, mixed, particularly the yellows,
Double Pompon, particularly the pure pink ones,
Dwarf Snowball, white,
Dwarf fireball, bright scarlet.

To my own taste, the variety which includes a color which I will specify as Jacqueminot is extremely beautiful. The strong, deep, rich red, of which the zinnia is capable, is not only valuable in the garden, but it is beautiful under artificial light in the house. The intense color of the Jacqueminot rose is familiar to every one, and I need not add that it is so magnificent that if one cannot possess the
rose itself, the same color in another flower is particularly desirable. This quality of intense color the Jacqueminot zinnia possesses; to appreciate its full beauty it must be seen either in broad sunshine outdoors, or under the lamp in the house. A cluster of these zinnias arranged carefully in a round glass bowl and placed under the full light of a lamp on the dining table with its spotless linen cloth, is a sight which I believe must remove every bit of prejudice against this stately flower. Under skilful fingers every sign of stiffness in the foliage is lost.

In the garden the zinnia needs plenty of room, and it deserves the complete possession of a space which will allow the flower a distant but distinct prominence; and where the colors will stand against a full background of green.

It does not seem advisable to mix this annual with other flowers, except where its bushy figure is needed to hold a vantage point. The plant seems to thrive in sandy soil when a good lump of old manure or some phosphate is placed directly beneath its roots. Water is essential to its growth, and a little trimming and snipping off of irregular branches is beneficial now and then.
CHAPTER XVI.

THE WILD GARDEN, THE ROCKERY, VINES, AND AQUATICS.

WHEN we appropriate a small part of the garden for the support of a miscellaneous and nondescript company to which we apply the term "Wild garden," we make a proper concession in the direction of naturalism! A well planned, unconventional division like this, is sometimes a very beautiful element, of greatest attraction to flower lovers.

Minor Annuals. Besides the package of seed labeled "Wild Garden" there are other sources from which we may draw material for this "natural arrangement." There are a great number of the minor annuals which are very beautiful and which will prove very useful in this direction. I have sketched a few, to show how they look at the start; I allude to abronia, acroclinium, alyssum, artemisia, globe amaranth, argemone, asperula, bartonia, brachycome, browallia, cacalia, clarkia, centauraea suaveolens and moschata, convolvulus minor, datura, gilia, godetia, helichrysum, ice plant, linum, mignonette, molucca balm, nigella, rodanthe, sedum, silene, thunbergia, Virginia stock, and venidium. Nearly every one of these I have grown in my own garden and found easy of cultivation.
The wild garden, however, does not depend entirely for its attractive appearance upon the sowing of these seeds in a careless and unsystematic way. The plot of ground, in the first place, should be irregular in outline and surface, and in the proximity of a rockery; in a word, the very surroundings of the chosen spot should be natural and in a measure wild. I should expect to see a bush or two of black alder, and perhaps a good specimen of the witch hazel near at hand. The mountain ash would be a well chosen accessory, and with some eulalia grasses opposite, the effect would be quite pretty and harmonious. There ought to be rocks imbedded in the earth at irregular corners of the plot, and a bit of clematis or ampelopsis here and there would add the touches of variety and color which nature herself shows in any of her own free arrangements. I should not be content alone with seed sowing, but I should obtain a root or two of some hardy wild flowers like the golden-rod, aster, pink yarrow, and yellow field lily. A rockery forming one part of this natural arrangement, should be filled with flowers of a similar character; it is a mistake to pile too many stones together; there would better be large spaces between, holding nourishing earth, and maybe a good, strong, small specimen of wild flowering cherry, or a flowering almond. A dwarfed sugar maple would be quite an acquisition for the rockery, and I even like
to see the canna hold a vantage point somewhere on high ground. The wild garden with the rockery, in a word, should look wild!

There is no sense whatever in allowing flowers to act discordantly one upon the other; that is the reason why I prefer to buy separate packets of distinct varieties of seeds. Clarkia and argemone may be planted side by side, but silene and centaurea suaveolens should never come together. Cacalia is dainty and pretty, rising from a mass of sweet alyssum, but gilia and convolvulus minor, both blue, would better be at extreme ends of the whole arrangement. The proper way of working out a scheme for the wild garden, is to make one's eye familiar beforehand with the forms and colors of the plants which will be pressed into service, and then plant the seed with the strictest regard for after appearances. Datura with its great lily-like cup, is a handsome plant which looks well in the vicinity of godetia or of the canna; the new dwarf calla is especially adapted to a rocky corner of the wild garden; but I would take care to place it nowhere near the datura, as the similarity of character (not structure) between the two would be prejudicial to their good appearance.

The tiny little Swan River Daisy (Brachycome,) is a dainty blue floweret which must be kept from
the vicinity of the blue gilia, and the crimson linum. Centaurea suaveolens is better company for blue flowers. Silene (Catch-fly) is almost like a small perennial phlox, and its crimson and white colors are sufficiently harmonious with molucca balm to merit companionship with the latter's peculiar white, purple, and green flower. Thunbergia is very charming grown so it will hang gracefully over some gray, lichenized rocks, and helichrysum is a good contrasting neighbor for it.

Nierembergia, and yellow oxalis are two excellent rockery plants which are well relieved by a gray color, and the blue lobelia is quite good company for them; the pink mallow is charming also beside any gray color. In arranging a rockery one can easily bring a little force of color or form into the composition by transporting some bright red geranium or some multitudinous flowered white petunia, and placing either in a central position where the color will tell against a darkish background.

Vines. One of the most luxuriant vines for producing some startling effects in trained form is the cobbæa scandens; the flowers are interesting, but not what might be called pretty. This splendid vine will climb over an arched gateway and spread itself with the rapidity of the rankest weed.
of nothing which will grow faster except it be the abominable barn grass with which I have to fight every summer in my otherwise weedless garden! In a race between cobœa and barn grass, I confidently believe the cobœa would come out ahead! We should be very careful where we put it on account of its grasping tendrils, and spreading branches. I remember placing some scabiosa near it one season, and spending the rest of the summer untwining the clinging tendrils from the long wiry stems of the scabiosa's flowers! There are other vines which give us handsome flowers and leaves, but not one I can think of which in so short a period of time gives us such a wealth of thick foliage.

Ampelopsis veitchii (the Japanese ivy) is the striking feature of nearly every brick wall in Boston! It is remarkably hardy in our climate, and its beauty and regularity of leaf is what distinguishes it from every other climbing plant that is known. The three-toothed appearance of the leaf occurring with pronounced regularity over the whole surface of the spreading vine, gives it a most decorative appearance, and the colors are as brilliant in autumn as those we are accustomed to see on the sugar-maple's leaf.

Wistaria is distinctly Japanese, and I have spoken of it already in the chapter devoted to Japanese things. Clematis jackmanii and paniculata are two magnificent vines, one bearing large purple-blue, and the other small white flowers, which are splendidly adapted for training over rustic summer-houses. The wild clematis which grows luxuriously in the valley where my summer studio is situated, is every stranger's particular admiration; with care it improves, and though slight in structure, it covers a porch very prettily; but the paniculata variety is infinitely superior; it comes from Japan, and
like everything else that has its origin in that land of flowers, throws all our native floral beauties in the shade.

Several annual vines that I grow myself with infinite satisfaction (in the artistic sense of the word) are the common morning-glory (particularly the magnificent ultramarine blue variety), canary bird vine, scarlet runner, sweet pea, cypress vine, and cobæascandens. I need not call attention to the lovely shaped leaf of the canary bird vine; it is sufficient to say that a rustic fence covered with it is more beautiful than words can well describe. The delicate covering of the green leaf is what most attracts one to the simple little vine; the flowers do not amount to much, except that they accent the daintiness of the pale, refined foliage. The gourds are very well in a way, but they contribute little more than a few curiosities to the garden; still, with careful training over a rustic arbor nothing is prettier than the odd fruit hanging amid the foliage of morning-glories or madeira vines.

**SWEET PEAS.**

In the sweet pea we have one of the most delightfully fragrant and ornamental vines imaginable, but one which is less of a climber than a spreader. My success with the flower has been variable but interesting—not a bud but what has paid me back in compound interest, so to speak, for every bit of earnest care lavished upon it. So much that is true and wise has been written about the sweet pea by the Rev. W. T. Hutchins, whose interesting
book entitled "All About Sweet Peas," has been published by W. Atlee Burpee & Co. recently, that there is nothing left for me to say about the flower, unless I confine myself to a description of its extraordinary colors. My own method of arranging sweet pea vines is confined to a fence or hedge row, which I create out of chicken-yard wire and rustic posts. This fence serves the double purpose of a thing of beauty, and a barrier against the roaming cow, who, by the way, frequently takes toll in the shape of a fine bunch of my favorite Boreattons. The varieties which are most attractive in color are:—

Boreatton, red-purple and violet,
Mrs. Sanky, white,
Lottie Eckford, white blue-edged,
Orange Prince, scarlet pink and rose pink,
Blanche Ferry, pink and white,
Cardinal, red-crimson and red-scarlet,
Grand Blue, ultramarine-purple and purple-crimson,
Primrose, cream-yellow.

There are many other varieties with charming colors, but the above selection is most satisfactory to me from the artistic point of view. Lottie Eckford is very delicate in color, and I should choose Primrose for its companion. The crimson and ultramarine blue varieties are also companionable, but intervening white is an advantage. Orange Prince is excellent beside Primrose, or Lottie Eckford. With all deference to a perfect harmony of color, I may add that there is really very little discord
to be found in an indiscriminate mixture of all varieties. Still, better color results may be obtained by planting the seed or arranging the blossoms together as I have suggested. There are a number of hardy vines for permanent situations which I must not pass without a few words of recommendation. The honeysuckle needs no praise, but I think it is not used as frequently in the garden, over trellis and arbor, as it ought to be. Perhaps we have too few summer houses on our grounds to enable us to use vines as freely as we would wish; the character of a typical American garden shows itself in winter—barren. Not only flowers are gone, but nothing stands to break the forlorn flat wastes. There ought to be something constructed for the accommodation of the cinnamon vine, Dutchman's pipe, latherus (perennial pea), white jessamine, trumpet creeper, moonflower, Chinese matrimony vine, and passion flower. The last mentioned conventional character is too beautiful and interesting not to hold a strong place in at least the more elaborate garden which has a greenhouse to depend upon in winter. The Dutchman's pipe and the trumpet creeper are two broad and effective characters which ought to hold a broad background position. It is almost invariably the case that heavy vines cover house walls and piazza posts in inordinate and tasteless profusion. I do not think one can claim anything artistic in the appearance of house or piazza overwhelmed with vegetation. On the contrary, with few exceptions there is a wholesale sacrifice of good taste, because it is one of the cardinal principles of art that the construction of a thing should not be hidden from sight unless it is characterized by skeleton framework devoid of any salient points for natural and
subordinated decoration. So, one wants to see a house or a piazza, and not take it for granted that the structure exists behind a towering mass of foliage.

**Aquatics.** A few aquatics in the garden are a great addition to its attractions. The fountain which is suggested in a previous chapter is much more beautiful and interesting if it contains a clump or two of water-lily roots. Then, sunken tubs are always easily managed, and the effects which they produce in conjunction with such plants as daffodils, tigridias, irises, zea, and common flag, are extremely tasteful and ornamental. Aquatics which are easy to cultivate are recommended in plenty in the florists' catalogues, but one would better depend on actual experience to know which is best for certain gardens. What is suited to one person's needs will not be suited to all. The Egyptian lotus is a grand specimen adapted to large surroundings; the American yellow variety is also big and effective but none the less beautiful. The common white pond lily (*Nymphaea odorata*) is too well known to need a word of praise here. The Zanzibar lily is a perfect jewel, easy of cultivation, and suited to a tub; there are three colors, blue, rose, and purple; perhaps the rose-colored one is the prettiest, but this is purely a matter of taste. There is also a beautiful pink lily which comes from Cape Cod; it is very hardy, and does not exact much attention when once planted in the water. Other good aquatics are the water poppy and the water hyacinth. The latter (*Eichhornia crassipes*) is not known nearly as well as it should be; it grows so easily and increases so rapidly that we should by all means try.
the dainty, floating little thing in the tub that holds the water lilies, or in the fountain.

Clear Water in Ponds.

When one possesses grounds ample enough to hold a miniature pond, provided it is kept constantly fresh by the influx of spring or brook water, there is no end to the opportunities of making the garden picturesque. The water edge can be lined with irises and daffodils; the masses of color on flowering shrubs, through skilful planting, may be increased by the advantage of reflection, and plant forms may be rendered the more beautiful by proximity with a clear expanse of water; nothing, though, is more repulsive looking and more unhealthy than the green-scummed, stagnant pond! If we have no spring or brook-fed sheet of water, better have nothing more than a fountain or a tub. Even the ponds of Central Park, with their delightfully artistic surroundings, lose half their beauty in the more picturesque corners by the lifeless stagnation of turbid water. The crystal streams and ponds near my summer home in the White Mountains have taught me what water ought to be! less than pure, in park or garden, it is as obnoxious to an artistic eye as it is otherwise unhealthy.
CHAPTER XVII.

PERENNIAL AND VARIOUS PLANTS.

ALL the perennials, so far as colors and forms are concerned, are subject to the same conditions, artistically considered, as the annuals. It is therefore unnecessary to consider them in detail; but there are many which are so beautiful that their presence in the foreground of the garden is especially desirable.

Geraniums are deservedly great favorites; but one cannot help wishing that the scarlet varieties were not so prominent in every garden, small and great. Certainly the warm pinks, the white, and the delicate tints are much less offensive to the other denizens of the flower beds. The trouble is, we too often bring in some new and delicately colored plants and, without the slightest consideration for neighborhood, deposit them beside a bed of flaming scarlet geraniums, forgetting that scarlet is a color which is so self-assertive that nothing near it except white is able, as we say, "to hold its own." Unless I particularly wished a strong scarlet patch of color to hold some prominent point in my garden plan, I would never admit more than one red geranium to four white and pink ones in any arrangement for the flower beds. Beware of the magenta petunia throwing its somber color into the balance with scarlet, and the mottled colors of the coleus attempting to hold themselves well beside pure pink or orange! Then the caladium, with its wonderfully veined
leaf, is also no character to stand beside any strong color scheme. The setting for the caladium is green; nothing else will do quite as well.

The ornamental and distinctively out-of-door plant which we all admire for its color effect in broad reaches of the garden—the hydrangea, is remarkable for its range of dainty tints extending between blue and pink. No other flower except, it may be, the hyacinth, is possessed of these rare and delicate broken colors. How unwise it is to allow the scarlet geranium a position within a mile of it!

**Blue Color.**

The blue forget-me-not is no companion for it either; nor is this dainty flower beautiful when seen in a broad mass of color; the blue becomes grayish in tone as soon as too much of it is spread out beside colors more pronounced in character. The blue of the forget-me-not is best seen directly beneath one's eye; and a small amount is quite sufficient for the purpose.

**Old Favorites.**

The lemon verbena and the sweet-scented geranium are both deserving favorites, which we should certainly possess on account of their delicate scent as well as their peculiar green foliage. Oleanders are old favorites, and one can forgive the flower for looking artificial, because the bush is so conventionally beautiful and the green leaves so magnificently glossy and boldly stiff! We do not appreciate the full value of variety as nature furnishes us with it; otherwise we would not pass by the camellia japonica, the zinnia, and the wild calmia, with the impression that they are stiff and ungraceful; the fact is, we are really insusceptible to some of the boldness which is part of nature's beauty.
If there is any one of Flora's children which is not bold, it is the graceful columbine; yet both flower and leaf are conventional in character. I do not fancy the blue-purple varieties myself, but they are quite pretty as blue flowers go. The common, wild, red and yellow variety is charming; so is that one named Chrysanthemum and the other named Chrysanthemum alba. The columbine deserves a foreground position. Foxglove is bold in every sense of the word; its stalks are tall, its stem is sturdy, and the flower is characterized by a stern simplicity well worth one's study. The colors are aesthetic, and the magenta-crimson variety is too handsome to pass without special mention. The double pink holly-hock is a prize for any garden; one regrets that it is not more hardy in a northern climate; but with care it rewards one with magnificent, delicately tinted flowers like the rose in profusion of crowding petals. The other colors are very beautiful, but the pink and the white seem to me especially attractive. For that matter, hock holds boldness and stateliness with unapproachable solidity, and it will be a long while before the dear old-fashioned flower will lose its popularity. What would a garden be without it? With the lily and the sunflower it offers us the most splendid opportunities for strong relief against dark backgrounds.

Lantana and heliotrope are two estimable characters deserving a strong position in the garden beds where there are a goodly number of white flowers. Aconite is a splen-
did dark-blue flower that does well under trees, where nothing else will grow. Bellis (the double daisy) is no favorite of mine, as it contributes little color to the garden; but it grows easily, and is a bit of variety not unwelcome in a green lawn; it looks pretty hiding in the grass.

**WHITE LARKSPUR.** I have rarely seen anything more dainty and refined than the white larkspur, which Mr. Fewkes has growing luxuriantly in a long, wide section of his greenhouse: there are many hardy varieties of all strengths of blue color, but nothing seems to me quite so lovely as this white; but, either white or blue, the flower deserves a place in the garden. Phlox decussata is a splendid plant for a permanent locality, and it is, of course, a great favorite; I should treat it, in the artistic sense, as I would Phlox drummondii. Canterbury bells are old favorites and need no word of recommendation from me. This fine biennial should be planted in a background position, where a good clump will make a middle distance color patch. The "Cup and Saucer" rosea variety is very beautiful.

The great, generous-faced paeony, one of the most delightful flowers of spring, should have an established position in the garden where everything else will fit around it with appropriate contrasts of form. Its bushy habit entitles it to the companionship of some slim-waisted neighbors like the irises. But it is immaterial what colors are in its vicinity, as they are pretty sure in the season of spring not to be either strong or wide-spreading. The paeony really furnishes its own color
harmony, as the bush is large, and the foliage forms a fine background for the flower, whatever its hue or tint. I like the pink and the white varieties best, as they are most effective in the garden as seen from a distance. But speaking of the paeony reminds me of its enemy (at least in my experience), and also the enemy of everything else fresh and green that comes up in spring and early summer:

A Horrid Worm!

I allude to the abominable cut-worm—a nasty, brown, fat creature like my sketch. He comes up at night from earthy haunts about two inches away from a succulent plant, goes for it, and, instead of regaling himself on a green leaf or two, he attacks the stem about half an inch above the ground, cuts a notch in it seven-eighths of the distance through, and then retires in the early morning light to work his way under ground to the next plant, which on the following night suffers likewise. Of course, any decent plant refuses to survive such treatment, and only the rankest weeds attempt to recuperate.

But I have fought against this wretched, night-working garden pest with some success by digging four inches around the plant he has destroyed, and invariably capturing him; then he is shown no mercy! My little sketch shows the nature of his deeds.

The primrose is a lovely spring flower which is best adapted to some bed bordering the grass-plot. There is hardly a variety which is not perfectly beautiful, and we should encourage the presence of the flower in our gardens as we would that of the much loved violet. The violet is easy of culture and remarkably
hardy. It is scarcely necessary to add that the flower needs a grassy, retired nook where it may grow undisturbed. The old-fashioned garden favorite, tritoma, is a character deserving a place in the background, where its stalks of ruddy orange flowers may be relieved against something dark.

**Crimson Sweet-William.**

Sweet-william is charming in all its tints and hues. I have a rich, deep red variety and one crimson-pink in tone, which I esteem especially for their fine effect of color in early summer. A broad patch of this old-fashioned flower is a point of beauty in the garden. I should be very particular to keep all scarlet and orange flowers from its vicinity.

Fuchsias of all varieties are pretty, although nature has painted some of them with strangely dissonant colors. Purple and scarlet are, as a rule, entirely at swords' points with each other, yet nature has combined these two hues with considerable success in one of the varieties. The Black Prince, Little Alice, Speciosa, and Ernest Renan are varieties which, on the whole, are most satisfactory in the combinations of their colors.

**Various Delicate Characters.**

The yucca, calceolaria, gloxinia, azalea, cyclamen, and cineraria are all greenhouse subjects with which one would meet with some success on moving out-of-doors; but the garden is inseparably connected with the forcing-bed and hothouse if there is any broad treatment given it. It must be borne in mind that the earliest spring and the latest fall are both marked in the garden by occupants which absolutely demand greenhouse care. The place for all such plants, I think, is in good-sized, plain, or simply ornamented tubs, a description of which may be found in the chapter on Garden Furnishing. A considerable element of beauty in garden arrangements consists of such movable
material. The accompanying sketch shows one of the simplest kind of tubs placed beside a path, and filled with two or three ricinus plants.

It is a matter of great regret to me that the splendid cineraria is not a hardy character; nothing is needed more in the spring garden than this remarkable plant, which renders the violet and magenta colors of the rainbow with such incomparable brilliancy! It would be wise for us to exert ourselves to the utmost in procuring the plant, with its unique, aesthetic flowers, for either the conservatory or the early spring garden.

The abutilon will not contribute much color to the garden; but in form it is delightfully graceful, and set in
the midst of a broad space with surrounding shrubbery its flowers and leaves are likely to be well relieved. The background for a rather tall plant like the abutilon is an important point in the garden which claims to be artistic. I have already laid considerable stress on the necessity of good backgrounds, for the reason that they relieve color. I must draw attention to the excellence of the California privet in this respect; it furnishes a remarkably fine backing for bright colors; it also makes one of the best formal hedges that we can possibly obtain in this country. It seems a pity to say this with the old favorable English box in us know how persuade the latent plump and fresh, mind one of a seedy old tramp! Irises I always prefer to see near some water; and if nothing better can be devised, a sunken barrel filled with aquatics and surrounded with some mossy stones and a few clumps of the yellow and blue varieties irregularly arranged, is a pretty object in any garden, great or small. Lobelia and feverfew planted near, with the old-fashioned but none the less beautiful and interesting blue-eyed spiderwort, also contribute much to artistic appearances. A pretty plant of torenia so placed that its color will have the advantage of some white neighbors is also what may be considered a water-side beauty deserv-
ing a prominent position in the garden. Begonias and hibiscus can be placed in the same situation as the abutilon; the flowers need relief as well as the foliage, and a darkish background is desirable.

Tuberous begonias are more or less difficult to cultivate as summer bedding plants; but success in this direction means some perfectly charming results in the color effect of the garden during late summer. So remarkable are the colors and forms of some of the best known varieties, that we should not lose an opportunity of trying this lovely flower out-of-doors, no matter how difficult the road may be that leads to success. The number of "Gardening" dated December 1, 1892, contains some interesting facts contributed by Mr. Thomas Griffin, a begonia specialist, about this beautiful flower.

Of all the irises perhaps the Japanese varieties are most satisfactory (Iris Kämpferi); their colors are, white with yellow markings, pale blue, purple, and violet; sometimes these colors are beautifully streaked with white.

**SCARLET SALVIA.** Salvia splendens is a particular favorite of mine for forming a bushy, hedge-like line in the garden. The plant is peculiarly thrifty, easy of cultivation, and takes a symmetrical, compact shape planted singly; in either case it gives us a blaze of splendid scarlet color, which, however, we must be careful to keep from the vicinity of anything else but white and green. Yucca filamentosa, a plant which is a prize for the amateur, is a very good companion for scarlet salvia.

An excellent subject for the ornamental tub, and one which carries the air of the tropics with it, is the Otaheite
orange; but when we introduce anything of this nature in the garden, it does not seem appropriate that annuals and perennials of the temperate zone should be in the immediate neighborhood; as far as may be practicable, it is best to group together all plants having at least the appearance of tropical character.

Endless Variety. The most confusing thing about the selection of plants and seeds is the endless variety we are brought face to face with. We will suppose a small garden already furnished with, say, one clump of lilacs, another of syringa, two or three rose-bushes, and a small number of such plants as hollyhocks, lilies, geraniums, pinks, and fuchsias. What shall we invest in beyond these? Already we have considered at length a large number of some of the major and minor annuals, and now we have had under our eyes a formidable list of perennials and various hardy-rooted plants. What shall we take and what leave? that is the question. My advice is comprehended in the hint given at the beginning of this book: take whatever offers the greatest amount of color. The more flowers we have, the more color; and what is a flower garden without plenty of color? Nothing!

In conclusion, I wish to apologize for the limitations of this book consequent upon the fact that it demonstrates a point of view peculiar to an artist. But if we have learned things less botanical than artistic, we have still held loyally to our subject—the garden’s beauty! What we all want in these days of complicated and (if I may be allowed the term) rapid living, is a short and straight road to enjoyment
and success in every department of art, broadly considered. The garden is, not less than the studio, the place for the enjoyment of what is essentially aesthetic! Do we not, candidly speaking, take more interest in the scarlet and gold of a flower than in the number and character of its petals and anthers? I believe we do. The gardener’s pride is centered on the loveliest of the flowers he has cultivated; perhaps his greater pride rests on the beauty of the garden itself, which is, justly speaking, far more the work of his own hand. I believe the short road to success in the effort to obtain a beautiful garden is dependent upon a close and conscientious attention to simple art principles, which are surprisingly commonplace when one once becomes thoroughly acquainted with them; and the most remarkable part of it all lies in the fact that nature reveals these principles in everything she does!
CULTURAL NOTES.
BY A. H. FEWKES.

CHAPTER XVIII.
ANNUALS.

HE directions which follow are for the benefit of the amateur gardener, and are intended to give him a better understanding of the nature and management of plants.

Groups of Plants. To discuss the cultivation of each plant separately would take more space than the limits of a book like this will allow; so I will place such plants as need the same treatment in distinct groups, giving general directions for each group.

Certain plants require a particular treatment which will need special mention; these will be taken up separately.

The plants mentioned by Mr. Mathews may be arranged in the following groups, viz.: Annuals, Perennials, Biennials, Bulbs, Roots, Shrubs, and Trees.

Annuals. In many gardens a large part of the plants grown are annuals, and to their successful cultivation much of the attractiveness of the garden is due. They are usually classed as hardy and half-hardy. The seeds of the former may be planted in the open ground in April and May, or as soon as the ground is sufficiently warm. The soil should be thoroughly worked over to get it into a mellow
condition, and should be well manured. If it is of a clayey nature, the best dressing is well-rotted horse manure with clean straw bedding, which will keep the soil open and prevent its hardening. The manure should be thoroughly mixed through the earth, and not simply turned under; that is something which only a careless gardener does. Commercial fertilizers are of great value, especially in sandy soils, if properly applied.

**Flat Flower-beds.**

If the seeds are to be planted in quantities and exclusively in one bed, the latter should be carefully raked over until it shows a surface as nearly level as possible, without a trace of the roundness which is so often given to flower beds; a rounded surface sheds water instead of holding it until thoroughly absorbed. All fine seeds should be simply strewn on the surface and gently raked in.

If the soil is light, the surface may be pressed down with a board. A very good plan to insure the certain germination of seeds planted in the open ground is to "mulch," or cover over the surface after the sowing with clean straw, or straw shaken out of horse bedding. If the ground is dry at the time of planting, it should be lightly watered before the mulching is put on; it will need little watering then until after the mulching has been removed, which should be when the young plants begin to push their roots into the soil. The entire covering should not be removed at once, but would better be taken off gradually, so the young plants may become accustomed to strong sunlight. As soon as the seeds begin to germinate they should be watched carefully, as the young plants will become too much drawn if covered over too long. This method is very useful in raising pansies from seed, which should be planted early in August if spring flowers are desired. As soon as the seedlings are large enough to handle, they should be
transplanted into cold frames, where they must remain covered through the winter, and until late in March or April.

When plants are not required in quantities, it is a good plan to sow the seed in small patches at intervals, through the borders, or garden beds.

**Thinning Out.** Many of the annuals it would be best to plant where they are to remain. If they come up too thick, it is very easy to thin out the patch by pulling up the more weakly looking seedlings. This treatment will be found advisable for the following:—

Sweet alyssum, candytuft, clarkia, eschscholtzia, larkspur, linum, mignonette, portulaca, poppy, canary-bird vine, sweet peas, and gourds. The following annuals will grow better when given an early start with heat in March, viz.: ageratum, amaranthus, aster (for early flowers), calendula, centaurea, celosia, dianthus, ice plant, nicotiana, phlox drummondii, ricinus, salpiglossis, scabiosa, stocks, zinnias, thunbergia, and nierembergia. These may be planted in rows in the hot-bed, or they can be planted in boxes or pots placed on the hot-bed or in the house window. Later they will need to be transplanted into small pots or pricked out in shallow boxes.

**Soaking Seeds.** Large seeds should be planted deeper than small ones; but it is better to err on the side of shallowness rather than on that of depth, as the failure of seeds to germinate is mostly due to too deep planting. Many seeds are so hard that they will lie in the ground a long time before the moisture will penetrate them. The germination of such seeds is hastened by soaking in warm water; some are even so hard that quite hot water can be used to advantage; as an instance of this kind I may mention the cypress vine and the canna; the latter can also be helped along in its germination by making a small hole in the
shell. The sweet pea, although not a very hard seed, can be soaked over night with good results if the ground is dry or the time of planting rather late.

The seeds of the cobæa need special attention; they are large and flat, and if they are planted flatwise they will decay. They must be put in the ground edge down, with only a slight covering over them.

Seedlings in Pots. As many annuals reach maturity and become unsightly long before the summer is gone, it becomes necessary to make several plantings at different times to keep up a succession of flowers. It will be found that the transplanting or replacing will be easily accomplished if the seedlings from late plantings have been grown in pots; from this condition they are ready to grow uninterruptedly and without wilting.

The half-hardy or tender annuals ought to have their seeds planted early in a hot-bed or in the house, as they will not come to maturity if later they are put in outside ground when it is warm. I must not pass the annuals without a few words about the aster, which is undoubtedly the most popular of them all, although in ordinary cultivation only a few kinds are grown. There are many beautiful classes of the aster, and we should select from these the following as especially beautiful: Victoria, Truffaut's Pæony-flowered Perfection, Comet, Pearl, Mignon, Crown, and Jewel.

STOCKS. The stock, or gilliflower, is one of the most useful annuals, and is very beautiful in its various tones of color. For summer flowering the seeds should be planted early, in the house or hot-bed, and transplanted into pots, as soon as the tiny seedlings make their second leaves.
They should never be allowed to grow pot-bound, and must be kept cool and airy, otherwise there will be trouble from the green fly. It is best to transplant them as early as possible in the open ground, where they will flourish if given plenty of manure and water.
CHAPTER XIX.

PERENNIALS, BIENNIALS, AND SHRUBS.

PERENNIALS should be found in all well-regulated gardens; a choice selection of them gives variety through the entire season. They are particularly interesting in the early spring, as they make their appearance immediately after the frost is out of the ground, and when everything that is green and growing is most appreciated. They do not lend themselves readily to massed arrangements, so they should be planted in such a manner that when one kind has begun to lose its beauty some other will be coming in to take its place.

Most of them grow easily from seed, which should be planted the same as annuals, the seedlings being transplanted in August or September, and carefully protected during the first winter.

Propagating. The ordinary method of propagating these plants is by division of the roots; this is best done soon after the plants are through flowering, or during August or September. This time is better than the season of spring for division, as the plants will become ready to flower the next spring.

Most of the perennials need dividing every two or three years to keep them in good condition; but there are some with thick, fleshy roots, like the yucca, or with underground, creeping root-stocks, like the lily-of-the-valley, which are best left undisturbed.

The paeony when planted in deep, rich soil, need not be
disturbed for years if it is annually treated to a thorough dressing of manure.

Other species which do not need dividing often are the hibiscus, aconitum, and columbine. The hardy phlox is particularly benefited by division, as thereby its growth becomes more thrifty and its flowers larger.

Certain varieties are improved by annual division, viz.: lobelia cardinalis, chrysanthemum, cowslip, English primrose, sweet-william, violet, feverfew, forget-me-not, and larkspur.

**Treatment of Carnations.** The garden car

"layered" every ing, as it is
die out if this is not done.

makes new growths at the base branches, and as soon as these
to handle easily they may be

ing a knife-blade through the
turned toward the plant, ward and out, leaving a

of the stem; the latter

soil. After they become rooted

be cut away from the old ones and reset.

**Yellow Day Lilies.** The yellow day lilies (hemerocallis) are

very beautiful and useful plants and

should be allowed to remain for years in one place, where they may grow into large and showy clumps. They are very easily propagated by division in August or September. The best species are H. flava, H. minor, H. thunbergi, H. middendorfii, and H. dumortieri.
IRISES. The Japanese iris (Iris Kämpferi) is a subject particularly suited to the amateur, and one which will repay him for all the care he may lavish upon it. To have the flower in its greatest perfection a good bed should be made for it of rotted sod and manure, two or two and one-half feet deep. The bed should be perfectly level with a board or sod edging about it, raised two or three inches from the surface, so that the bed can be flooded during the growing season; this edging can be removed in the fall. A good method for flooding, where water under pressure is at hand, is to lay along one side or through the center of the bed, a perforated pipe arranged with a valve for regulating the supply of water.

Over-head syringings while the plants are making buds and are blooming, prove very beneficial, as they clear away the thrips, which would otherwise greatly injure the blossoms.

Water for Irises. It must be borne in mind that in the cultivation of this plant the conditions under which it thrives best, are, an abundance of water during summer, while growing, and an absence of it during winter; or, in other words, the bed should be made on well drained soil, and arranged so the surface water will drain away during winter but remain during summer.

The hybrid pentstemons and wall-flowers are not hardy in northern latitudes, and need to be housed or packed away in cold-pits to keep them over winter. There are several species of pentstemon which are hardy, however; the best of these is P. barbatus Torreii.

The interesting little yellow alyssum, A. saxatile, is essentially a rock plant, and should be placed where it will have good drainage and not too close a covering during winter. It may be raised from seed planted in the spring in the open ground, or in a frame where the seedlings will have plenty of air.
The hollyhock will often continue for several years; but it is best treated as a biennial, and seeds should be sown every year in May or June for the next season's flowering.

Foxgloves and Canterbury bells are true biennials; and seeds of these should be sown in the spring to secure flowering plants for the next year.

**Winter Coverings.**

The matter of winter covering for perennials is an important one, and should be thoroughly attended to each autumn; the covering should remain on the beds until the plants begin to start in the spring.

For ordinary purposes there is no better material than leaves from the woods; but there are some evergreen plants which need a less compact covering than leaves afford, as these will pack down very close and rot the leaves of the plants. The strawy part of stable manure, and brush, are better coverings for such plants.

**Shrubs.**

It is indeed a small garden which does not accommodate a few shrubs, and no large garden is complete without quite a collection of them; nearly all will grow in any ordinary soil, but they appreciate good treatment and repay the labor spent upon them by producing an abundance of bloom. A great mistake is often made by planting them beneath large growing trees like the elm, where their struggle for existence is a hard one, and as a consequence their appearance is not satisfactory.

The practice of clipping shrubbery is a very bad one and cannot be too severely condemned. It is a most distressing sight to see a front yard full of shrubbery with each plant clipped into some formal outline which destroys its natural grace and beauty.

**Pruning.**

All shrubs need more or less pruning, but this should be done only to help them to grow into their own best natural forms. All dead and un-
sightly branches should be removed in the spring, and during midsummer any ungainly growing branches should be cut away. The Cydonia Japonica, weigela, deutzia, lilac, syringa, althea, rhododendron, and magnolia are best treated this way.

The rhododendron thrives best in a peaty soil and should be planted where it can be protected from bleak winds and hot suns during the winter. Where evergreen trees do not form a natural protection for them, it is a good plan to use some evergreen boughs as a shield in the fall; these serve the double purpose of forming a screen from the sun, and a protection from the bleak winds. Liberal dressings of manure will be found very beneficial if applied just before the plants begin to make new growth.

The drooping forsythia should be carefully watched to prevent the long, pendant branches from touching the ground and forming roots; it is best to cut these back slightly when they begin to trail low.

The hardy hydrangeas need close pruning every spring to produce fine large heads. The small and weak wood should be trimmed out and the strong branches shortened back to two or three eyes. The flowers are produced on the present year's growth, and if the branches are not cut back the shrub soon grows ungainly in figure.

**MAGNOLIAS.** Magnolias delight in a deep, moist soil, and a location where they are sheltered from bleak winds in winter. If the ground is naturally dry and light it should be dug out to the depth of three feet and filled in with good loam before planting; and if the tree is to be placed near the house, it is a very good plan to have the water-spout from the house-roof discharge the water in its immediate vicinity. Very satisfactory results are obtainable with Magnolia soulangiana in this way.
CHAPTER XX.

ROSES, CHRYSANTHEMUMS, AND GARDEN SOILS.

All hardy roses will grow well in any good garden soil, but to have them in perfection, a special bed must be made for their reception; a very good way of making one is first to remove the soil to the depth of about three feet; if the hole is naturally wet, the bottom should be filled in from six to eight inches with small stones for drainage; ordinary soil will not need this treatment. Then the proper soil is made by piling up pasture sod interlayered with cow manure and allowing it to rot for a few months. The entire bed should be filled up with this compost; near the bottom a quantity of half-inch or inch bone may be dug in to advantage; this makes a lasting material on which the roots of the roses can feed as they strike down into the bed.

Setting Out Rose Bushes.

The bushes should be set out either in spring or fall, and placed about two or three feet apart; if in the spring the work should be done as early as possible; and if in the fall the plants should be well protected with leaves preparatory for winter.

Taking everything into account, healthy, well-ripened roses on their own roots give best results. The danger with budded or grafted plants is that the suckers from original stocks are almost certain to kill the grafted shoots,
unless under the watchful eye of a professional gardener. "Own root" roses are, therefore, much safer to plant, and are more certain to meet our expectations.

**Winter Protection.**

For winter protection there is no better plan than to heap the earth up against them on each side to the height of ten or twelve inches and fill in the trench between with strawy manure. The following spring the soil should be leveled down again and a heavy dressing of manure dug into the bed.

Early in the spring, all weak wood should be pruned out and the strong shoots cut back to two or three eyes. A good rule to follow in the matter is to prune severely the varieties of weak growth, and moderately those of vigorous growth. If the vigorous varieties are severely pruned they will make a very strong growth but will form few buds.

**Syringing.** An operation which is quite necessary for the production of fine roses is the syringing of the foliage to prevent the depredations of insects; the thrips are the most troublesome. The syringe should be used as soon as the leaves begin to unfold in the spring, and at each time when new leaves appear, or when the liquid used has been washed away by rains. There is no better material
to use for the syringing, than powdered white hellebore, which may be stirred into the water just before using the syringe; enough should be used to make the water look quite brown in the pail, so when it dries upon the foliage, a slight brownish dust will be seen. It is necessary that the liquid should be applied to the under-side of the leaves, as it is there that the thrips are to be found.

**Various Spring Bulbs.**

Snowdrops, Siberian squills, crocuses, hyacinths, tulips, daffodils, and narcissi are all beautiful and easily grown; they appreciate good soil, need but little care, and shallow rooting annuals can be planted with most of them after they are through flowering. But the narcissi, would better be planted where the ground will not need to be otherwise occupied during summer. A very effective place for them is a bed made on the south side of the house, against the underpinning. The slight warmth from the cellar causes them to start early in the spring and flower much sooner than if planted elsewhere.

The best varieties of the trumpet daffodils are the following: **Iris King**, Emperor, Empress, Grandis, *Horsfieldii*, Michael Foster, Henry Irving Major, Maximus, Golden Spurs, Moschatus Nobilis, Obvallaris and Princeps. The best double trumpet is the Van Sion or Old Double Dutch Daffodil. Other good kinds of narcissi are, Incomparables, Cynosure, *I. Stella*, *I. Princess Mary of Cambridge*, *I. Sir Watkin*, Poeticus Ornatus, *Leedsii Amabalis* and *Leedsii Circe*.

**CHRYSANTHEMUMS.**

As there are many who wish to grow chrysanthemums for flowering in the house in autumn, a few directions in regard to their cultivation may be acceptable. The young plants can be obtained from florists in the spring at small
cost, or they may be grown from the shoots which start up from the roots of the old plants which have been kept over winter. Unless proper facilities for striking cuttings are at hand, it is best to break off the shoots already rooted from the old plants and put them in small pots some time in March; these should be kept from getting pot-bound until it is time to plant them in the open ground in April. To make them bushy, the young plants should be cut back when they are only a few inches high; this will cause them to branch; the process should be repeated as fast as they grow until the middle of July. About the first of August, or some time before the buds form, the plants should be dug up, potted, and placed in the shade for a few days, at the end of which time they begin to recover; then they may be plunged in the ground in full sunlight, and kept there until it is time for frost, when they should be taken into the house where they can be protected from the cold. Great care should be taken about the water after they are established in the pots; never allow them to get dry. Liquid manure should be given them as soon as they fill the pots with roots.

Disbudding. As soon as the buds begin to form they should be thinned out, or disbudded, as the gardeners term it; that is, the buds should not be allowed to grow in clusters at the ends of the branches, but should be removed, all but one at each tip.

Large Blooms. The enormous blooms seen at exhibitions result from methods of special cultivation and not from a natural process. To obtain the best results, the plant is allowed to make but one stem and produce but one flower. This flower is not developed from the ordinary buds seen on bush plants, or "terminals" as they are called, but is the product of a bud which sets earlier than the terminal and is
called the "crown bud." If the chrysanthemum plant is watched carefully, it will be noticed that when it is allowed to develop without cutting back, a flower bud will be formed several times during the summer at the growing end, with several "growth" buds immediately below it. Ordinarily if this bud is left alone it will not develop, because the growth buds will start and rob it of all nourishment. This process of nature recurs at intervals through the summer, until eventually the "terminal" bud is formed with several smaller flower buds clustering close beneath it but without any more growth buds accompanying them. The proper bud to force into an exhibition bloom is the crown bud, which forms just before the branch starts which will bear the terminal bud.

**The Crown Bud.** As soon as the crown bud is formed, all growths below it should be removed, thereby throwing all the nourishment into this bud, which would otherwise serve in making further branch and leaf growth. As the bud begins to swell, stimulants should be applied to the plant in the shape of liquid manure; this will greatly increase the size of the bloom. Experience is the best teacher in such matters, and as soon as one learns what to expect and try for, the manipulation of the plants will become easy.

**Garden Soil.** A very important factor in floriculture is soil, particularly for potting plants; it is very seldom that ordinary garden soil is suitable for this purpose. Soil from the compost heap should always be used if possible and this may be made by piling together sods, manure, and wood-leaves, and allowing them to stand until decayed. The pile should be "thrown over" occasionally, so as to thoroughly mix and pulverize the soil. The different materials may be piled up separately if one chooses, and mixed after they have become decomposed.
For potting ferns, the soil should be chiefly decayed leaves, mixed with a little rotten sod and manure.

The best material in which to root cuttings is sand from the sand banks; but this should be very clean and free from loam, as the latter will cause the cuttings to rot. Beach sand, while very clean, is apt to contain a large amount of salt, which is very injurious to the cuttings.

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A LIST OF FINE HARDY ROSES.

Abel Carriere—Velvety crimson.
Alfred Colomb—Carmine-crimson.
Anna de Diesbach—Carmine.
Antoine Mouton—Deep rose.
Baron de Bonstettin—Velvety maroon.
Baroness Rothschild—Light pink.
Beauty of Waltham—Rosy-carmine.
Belle Lyonnaise—Pale lemon-yellow.
Captain Christy—Delicate flesh.
Charles Lefebvre—Reddish-crimson.
Duc d’ Aumale—Crimson.
Duke of Fife—Bright crimson.
Earl of Dufferin—Crimson-maroon.
Elise Boelle—White, tinged pink.
Etienne Levet—Carmine-red.
Eugene Verdier—Silvery-pink.
Fisher Holmes—Deep crimson.
Francois Michelon—Deep rose.
Jean Liabaud—Crimson-maroon.
John Hopper—Bright rose.
Mabel Morrison—White.
Mme. Gabrielle Luizet—Pink.
Mme. Victor Verdier—Carmine-crimson.
Magna Charta—Pink.
Marie Bauman—Crimson-vermilion.
Margaret Dickson—White, tinged flesh.
Marquis de Castellaine—Carmine-rose.
Maurice Bernardin—Bright crimson.
Mons. E. Y. Teas—Carmine-crimson.
Mrs. Paul—Light rose.
Paul Neyron—Deep rose.
Prince Camille de Rohan—Velvety crimson.
Rev. J. B. McCamm—Carmine-rose.
Thomas Mills—Rosy-crimson.
Ulrich Bruner—Cherry-red.
Xavier Olibo—Rich crimson.
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